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CITY OF ESCALON

GENERAL PLAN

CITY OF ESCALON
GENERAL PLAN
LAND USE AND CIRCULATION ELEMENT

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Land Use/Circulation Element Map

Bibliography

Planning Commission Resolution No. 77-1

City Council Resolution No. 445

THE ESCALON GENERAL PLAN

I

INTRODUCTION

A. GENERAL

This element combines the required land use and circulation elements. The purpose of this plan is to set forth background information, goals and development policies related to land use and circulation needs and issues in the Escalon area. It presents an analysis of the history of Escalon's development, its physical environment, an overview of the current socio-economic conditions, a plan, and a work program for plan implementation. This element clarifies and supplements the policies and maps adopted in other elements of the Escalon General Plan, and will be used to review and update those elements to keep the document internally consistent. The issues of recreation open space, and scenic beauty are covered in the Recreation and Open Space/Conservation elements of this Plan and will not be discussed further in this element.

Because of the nature of the Escalon area being larger than the existing or proposed city limits as viewed with today's governmental structure, the interpretation of this Element will reinforce inter-agency and inter-governmental cooperation for the effective use of land and the circulation patterns with orderly development.

B. LEGISLATIVE HISTORY

The California Legislature since 1955 has required a land use and circulation element. Authority for and the scope of these two elements are contained in Section 65302 a and b of the California Government Code which state:

Section 65302. The general plan shall consist of a statement of development policies and shall include a diagram and text setting forth objectives, principles, standards, and plan proposals. The plan shall include the following elements:

- (a) A land use element which designates the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land. The land use element shall include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan. The

land use element shall also identify areas covered by the plan which are subject to flooding and shall be reviewed annually with respect to such areas.

- (b) A circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element of the plan.

C. PREPARATION HISTORY

A general plan for the City of Escalon was prepared in 1965 and was adopted by the City Council on March 7, 1966. It consisted basically of a land use and circulation element. Other elements have been adopted since then, however the land use and circulation elements have remained the same. In its annual review of the general plan, the Escalon City Planning Commission in 1976 determined that the land use and circulation elements should be updated to reflect current development patterns fitting with today's needs.

In 1969, and again in 1976, the County of San Joaquin updated their general plan. The Escalon City Planning Commission was consulted on the two updates and recommend certain revisions for the Escalon area, however these changes were not incorporated in the City plan. With the City plan update, material from the adopted County Plan was used that is compatible with current and proposed City policies. It is the intent of the City to have a plan that can be incorporated into the County Plan in the future.

D. DEFINITIONS

Listed below are terms used in this element. Some of these may be further defined elsewhere in the text.

Land Use. Means the occupation or reservation of land or water area for any human activity or any defined purpose. It also includes use of the air space above the land or water.

Circulation Means the process whereby people and commodities move in a planning area.

1. The first part of the report is a general introduction to the subject of the study. It discusses the importance of the study and the objectives of the research.

2. The second part of the report is a detailed description of the methodology used in the study. It includes information about the sample, the data collection methods, and the statistical analysis.

3. Results and Discussion

3.1. The results of the study are presented in this section. It includes a summary of the findings and a discussion of their implications. The results are presented in a clear and concise manner, using tables and figures where appropriate.

3.2. The discussion of the results is presented in this section. It includes a comparison of the findings with previous research and a discussion of the limitations of the study. The discussion is presented in a clear and concise manner, using tables and figures where appropriate.

4. The final part of the report is a conclusion. It summarizes the findings of the study and provides recommendations for future research.

5. The report is concluded with a list of references. It includes a list of the sources used in the study and a list of the sources cited in the text.

6. The report is concluded with a list of appendices. It includes a list of the supplementary material and a list of the sources cited in the text.

RESEARCH

A. SETTING

Escalon is in the southeast corner of San Joaquin County which is centrally located in the 450 mile-long Central Valley of California. It is within two hours driving distance of the San Francisco Bay, Sacramento, Lake Tahoe, Fresno and Monterey Bay areas.

Escalon is a young city, founded as a community in 1894 and incorporated as a city in 1957. In its brief history the community has overcome many obstacles including several serious fires, the change from grain farming to irrigated agriculture, and the change in transportation emphasis from railroads to highways. Escalon has been molded by three major forces; agriculture, railroads and highways.

The earliest settler of great renown was Johnny Jones who crossed the plains in 1852 and settled in what is now Escalon. As the area developed, grain farming was the primary agriculture. Johnny Jones built up an "empire" of 3,000 acres and in 1867 built a two story brick home which still stands in Escalon today. Freight was transported along the "Old French Camp Road" between Stockton and Sonora. Excepting for that bit of commerce, the area remained agricultural.

With the organization of the San Francisco, Stockton and San Joaquin Valley Railroad in 1893, James Jones, son of Johnny, started subdividing what is now Escalon. The first train passed through Escalon in 1896. By 1899 the railroad was purchased by the Atchison, Topeka and Santa Fe Railroad Company which still operates through Escalon.

The agriculture has changed from grain farming to orchards, vineyards, pasture and other diverse crops with the successful application of irrigation. Active efforts towards irrigation of the surrounding lands was initiated by Wright Cowell in 1866. Years of frustration followed until the South San Joaquin Irrigation District was founded in 1909. The first irrigation season was 1914, and so another change in Escalon environment was launched.

The first auto travel is not recorded. But the ever expanding, ever changing highway system of the area had its influence. Escalon is located on State Route 120 which is the major route from the San Francisco Bay Area to the Sonora Pass area of the Sierras, and the Big Oak Flat route to Yosemite National Park. Also passing through Escalon is McHenry Avenue-Escalon-Bellota Road which runs from central Modesto to the Linden-Bellota area.

As all of the forces were and are exerting their influence externally on Escalon, the community was and is responding by establishing schools starting in 1903, a bank in 1912, civic clubs, fire department, sanitary district, recreation facilities and all other institutions of a modern community. The governmental functions were all brought together into one organization with the incorporation of the City of Escalon in 1957.

CHAPTER 10

10.1

The first part of the chapter is devoted to the study of the properties of the function $f(x) = \sin x$. We shall see that this function is periodic with period 2π and that it is an odd function. We shall also see that the function $f(x) = \cos x$ is periodic with period 2π and that it is an even function.

In the second part of the chapter we shall study the properties of the function $f(x) = \tan x$. We shall see that this function is periodic with period π and that it is an odd function. We shall also see that the function $f(x) = \cot x$ is periodic with period π and that it is an odd function.

In the third part of the chapter we shall study the properties of the function $f(x) = \sec x$. We shall see that this function is periodic with period 2π and that it is an even function. We shall also see that the function $f(x) = \csc x$ is periodic with period 2π and that it is an odd function.

In the fourth part of the chapter we shall study the properties of the function $f(x) = \arcsin x$. We shall see that this function is an odd function and that its range is $[-\frac{\pi}{2}, \frac{\pi}{2}]$. We shall also see that the function $f(x) = \arccos x$ is an even function and that its range is $[0, \pi]$.

In the fifth part of the chapter we shall study the properties of the function $f(x) = \arctan x$. We shall see that this function is an odd function and that its range is $(-\frac{\pi}{2}, \frac{\pi}{2})$. We shall also see that the function $f(x) = \operatorname{arccot} x$ is an even function and that its range is $(0, \pi)$.

In the sixth part of the chapter we shall study the properties of the function $f(x) = \operatorname{arcsinh} x$. We shall see that this function is an odd function and that its range is $(-\infty, \infty)$. We shall also see that the function $f(x) = \operatorname{arccosh} x$ is an even function and that its range is $[0, \infty)$.

In the seventh part of the chapter we shall study the properties of the function $f(x) = \operatorname{artanh} x$. We shall see that this function is an odd function and that its range is $(-\frac{1}{2}, \frac{1}{2})$. We shall also see that the function $f(x) = \operatorname{arcoth} x$ is an even function and that its range is $(-\infty, \infty)$.

Economically the mainstay of the community is agribusiness. The community provides services and goods for the surrounding agricultural area. The community contains one cannery and two wineries. The single largest industry is a steel fabricating firm of Hogan Manufacturing Industries. The community has a complete retail district including several automobile agencies.

In addition, Escalon provides residential areas for people working in Modesto and Stockton who like living in a small, friendly community. It is presently a comparatively compact community lacking fringe development in the unincorporated area.

B. PHYSICAL ENVIRONMENT

1. Topography

The topography of the area is generally flat with gentle sloping from east to west.

2. Climate

Escalon enjoys warm, dry summers, with temperatures occasionally exceeding 100°F; and moderate, wet winters, with temperatures dropping to freezing or below. The growing season averages approximately 300 days between killing frosts and is a result of the moderating influence of ocean breezes.

Escalon is located in the San Joaquin Valley Air Basin. In summer, air enters the Valley from the ocean through the Carquinez Strait. In winter, cold air drains off the mountains and hill slopes into the Valley, towards the ocean.

The average yearly rainfall in Escalon is approximately 14.11 inches. Most of it occurs between December and March, while June through August are virtually dry. Dense fog occurs usually in the late autumn and early winter months.

3. Natural Resources

A discussion and inventory of the various natural resources may be found in the Conservation and Open Space Element in the section titled Inventory under Chapter II - Research.

C. SOCIO-ECONOMIC OVERVIEW

1. Population

Essential to the revision of the Land Use/Circulation Element is the development of reasonable estimates of future location, type, intensity, and extent of land use. These estimates are those developed by the San Joaquin

County Planning Department in their latest adopted Land Use/Circulation Element. Since the adoption of that Element, factors affecting the growth of the Modesto area are having an influence on Escalon's growth, therefore the figures used are viewed as low. They are expected however to be useful for Plan development purposes.

The population of the Escalon Planning Area is projected to grow from its 1970 figure of 6,986 to a range of 9,050 to 9,418 in 1995. A major portion of the growth is expected to take place in the urban portion of the Escalon area because the agricultural areas will not be broken into smaller units and the economics of urban service needs will dictate the use of existing facilities. For the Escalon urban portion, the population is projected to grow from the 1972 figure of 3,120 to 4,977 in 1995.

2. Housing

The housing trends in Escalon have been similar to that in San Joaquin County. The household size is decreasing from the 1970 figure of 2.80 persons per household to the 1974 estimate of 2.67. This figure is expected to continue to drop to the range of 2.60.

In Escalon in 1976, approximately 80% of the housing units consisted of single-family units. The remaining units consisted of duplexes, apartments, and mobile homes. In the immediate future (5 years), this ratio is expected to remain the same because of current City policies and developmental activity. Discussion of overcrowded and replacement of existing housing are expected to be addressed in the Housing element.

To meet the housing needs for an increase in population, a lower household size, to maintain the same vacancy rate, and to end overcrowding, approximately 1200 additional units will be required by 1995.

3. Economy

Population growth and economic growth reinforce each other and together create the demands for additional development. Increases in population and the consequent market and labor supply attract more industry and business. A larger number of industries and consequent job opportunities attract workers and their families.

The employment information and projections in the San Joaquin County Land Use/Circulation Element were used as the basis for Escalon's data. While population is projected to increase approximately 35% for the Escalon Planning area, or 60% for the Escalon Urban Area, the employment is 94% for the Escalon Planning Area. Certain assumptions will have to be made to reconcile these figures, since both the population and employment projections appear valid. These assumptions are that people now commuting out of the area will have local employment opportunities, a larger number of households will have more than one person employed, and there will be more commuters to the Escalon Area.

The peak employment projections for September in the Escalon Area
(Except Agriculture) are as follows:

	<u>1970</u>	<u>1995</u>
Mfg. Food Processing	400	695
Other Manufacturing	17	260
Construction	129	185
Trucking Warehousing	29	85
Other Transportation and Utilities	5	20
Wholesale Trade	9	55
Retail Trade	109	185
Finance	25	30
Insurance & Real Estate	7	10
Entertainment & Recreation	-0-	25
Medical & Health	74	125
Government	153	160
Other Services	<u>27</u>	<u>75</u>
TOTAL	984	1910

D. PLANNED LAND USE ACREAGE - 1995

To develop a land use map, a projection on the estimated number of acres required. The acreage estimate and location for the various types of uses are determined primarily from the development policies. For use in this Plan, the figures used in the San Joaquin County Plan are reproduced here. The estimates are within a range that can serve the planning needs of Escalon.

PLANNED LAND USE ACREAGE - 1995
(in gross acres)

RESIDENTIAL	655
Low	530
Medium	125
COMMERCIAL	110
Retail	35
Commercial Service	60
Highway Service	15
INDUSTRIAL	240
Limited	85
General	155
RECREATION	45
EDUCATION	70
GOV'T/INSTITUTIONAL	<u>35</u>
TOTAL GROSS ACRES	1,155

III

ASSUMPTIONS OF THE LAND USE AND CIRCULATION ELEMENT

The following are characteristics of the future development of the Escalon area arrived at by consensus without substantiating information and which will supposedly occur during the planning period.

1. Population and economic activity will continue to increase with population in the urban area expected to reach a minimum of 4977 by 1995.
2. The number of new dwelling units required, except those replacing existing units, is expected to be a minimum of 1200, with approximately 960 to be single dwelling units, and approximately 240 to be multiple dwelling units.
3. Both the number of automobiles and automobiles per person will increase and will result in increased demands for more and better streets, highways and parking facilities.
4. Agriculture and agriculturally dependent industries will continue to play a major role in the economy of the area.
5. Environmental regulations or pollution will not constrain the overall, long term growth of the area during the planning period.

STATEMENT OF DEVELOPMENT POLICIES

A. OBJECTIVES1. General

- a) To create and maintain the best possible living environmental for all residents.
- b) To attain for all residents a variety of economic opportunities for employment and investments and to provide a beneficial economic climate.
- c) To establish a functional relationship between the land use pattern and transportation network which will meet the range of social, economic, and cultural needs of all citizens.

2. Residential

- a) To maintain and promote the distribution of residential densities as prescribed by the General Plan map.
- b) To maintain and promote economically, physically, and socially viable residential neighborhoods.
- c) To preserve viable agricultural land to the maximum extent possible in the development and expansion of residential areas.
- d) To promote development of educational, recreational, and other necessary public facilities contributing to desirable residential areas.

3. Commercial

- a) To encourage the grouping of commercial uses within compact areas.
- b) To maintain Escalon's function as an intermediate center to serve Escalon and the surrounding trade area.
- c) To provide a cluster of commercial establishments which serve almost exclusively the freeway traveler.

4. Industrial

- a) To provide desirable locations for a variety of industries by designating those areas which are best suited for industrial uses because of their physical character, compatibility with surrounding land uses, transportation facilities, and existing and planned utilities.
- b) To protect designated industrial areas from incompatible land uses in order to maintain their attraction for existing, expanding or future industries.

5. Circulation

To develop a street system that satisfies the needs for safe, efficient and reliable vehicle movement of people and goods within and through Escalon.

B. GUIDING PRINCIPLES

1. General

- a) Necessary expansion will be facilitated in a manner least disruptive to the agricultural surroundings and resources.
- b) Growth will take place in areas within and adjacent to existing development, precluding random skip and ribbon developments.

2. Residential

- a) The neighborhood will be utilized as the basic planning unit in maintaining and extending residential areas.
- b) Neighborhoods should be maintained through the use of a variety of methods including support of neighborhood improvement programs and conservation of existing housing whenever possible.
- c) Intrusion of incompatible uses into residential areas will be prohibited, and adverse effects of adjacent uses will be minimized.
- d) New subdivisions will be required to provide for community systems and facilities for water, sewer and drainage.

3. Commercial

- a) Shopping areas should be grouped along arterials in areas which are designed with limited access points and provided with ample space for parking.
- b) Highway service area shall be located and designed so as to have a minimum impact on the safe and efficient flow of traffic.

4. Industrial

- a) The total amount of industrial acreage designated in this Plan shall be sufficient to provide for a choice of sites.
- b) Industrial uses shall be located where the utilities required by the industrial use are available or can be made available.
- c) The grouping of industries will be encouraged to reduce conflicts with surrounding land uses and maximize provision of services.

5. Circulation

- a) The street system shall be used to guide as well as accommodate land use and development within the City.
- b) Planned land use and development adjacent to existing or proposed streets shall consider and not detract from the primary function of the road facility.
- c) Public transit service requirements shall be considered in street planning, design, construction and improvements.

- d) Major streets and highways should be planned and located so as not to break up neighborhoods.
- e) The functional classification definition shall be a policy guide for designing the street facility and a guide in systematic and economical expenditure of public funds.

C. STANDARDS

1. Low Density Residential

This category identifies those areas with a planned density of 2 to 6 dwelling units per gross acre, indicating a population density ranging from 7 to 15 persons per gross acre. These areas include typical single dwelling unit subdivisions with occasional duplexes, although multi-unit dwellings would be possible within planned unit developments.

2. Medium Density Residential

This category identifies those areas with a planned density of 6 to 15 dwelling units per gross acre, indicating a population density ranging from 15 to 35 persons per gross acre. These areas typically consist of older neighborhoods with single units or newer areas with duplexes, triplexes, and fourplexes. A wider variety of dwelling types could be achieved through use of planned unit developments.

This category is normally adjacent to the commercial properties forming a buffer zone of about 200 feet in depth between the commercial properties and the low density residential. This same type of buffer zone, 100 feet in depth, could be established along high volume traffic arterial frontage which is not developed into commercial uses. It is planned that these buffer zones will fulfill the need for multi-family dwelling units and at the same time, increase the desirability of Escalon's low density residential areas.

3. Retail Commercial

This category includes the following uses as defined in the San Joaquin County General Plan:

a) Neighborhood Shopping Areas

This provides convenience goods and services for daily consumption and frequent purchase to satisfy the most frequent needs of the surrounding residential area. The dominant store is usually a supermarket. Other establishments might include shoe repair, drugs, laundry and hardware.

b) Community Shopping Areas

This provides a fairly broad selection of goods, and services which are needed frequently, but not daily, and thus serve a trading area larger than the neighborhood. A major variety store or junior department store is often the major generator; however, there is less variety and fewer specialty outlets than in the regional center.

c) Central Business Districts

These areas are generally the main concentration of commercial activity within the urban centers. In addition to containing a variety of retail commercial establishments, these areas often provide financial, governmental, or other public services and attractions. The range of goods and services available is dependent upon the size of the urban center and its trading area.

d) Administrative and Professional Office Areas

These areas provide those commercial activities which are conducted in office-type facilities and deal primarily in service rather than goods. The major use of land consists of administrative and professional offices which provide financial, insurance, real estate, legal, medical, dental, educational, and other public services.

e) General Retail and Service Areas

These areas contain a wide variety of establishments which provide an assortment of completely dissimilar goods and services, but which are alike and compatible in several significant aspects. Each establishment is a self-generative business in which the goods are infrequently purchased and often the sole purpose of the shopping trip. Examples include automobile-oriented sales and services and building supply firms.

f) Wholesale-Distributive Areas

These types of commercial activities involve the buying, handling, and selling of goods before shipment to retail business. This kind of transaction does not require customer visits to the business location itself so there is negligible automobile traffic and pedestrian movement. However, these activities do generate a considerable amount of truck traffic, require space for storage and loading, and often need rail access. Because of these aspects, wholesale uses are generally incompatible with most other commercial activities and more nearly compatible with light industrial uses.

4. Highway Service Areas

These areas provide services which are oriented almost exclusively to the needs of travelers on freeways. The typical area consists of a cluster of commercial establishments including gas stations, motels and restaurants. Because of their orientation, all of these uses are considered to be mutually compatible. The clustering of these uses at interchanges eliminates the necessity for through traffic to enter onto the internal circulation system and reduces conflicts with local traffic movements.

5. Limited Industrial Areas

This category includes the following areas as defined in the San Joaquin County General Plan:

a) Restricted Light Industrial Areas

These are the "good neighbor" industries which do not permit the escape of dust, smoke, noise, or other operational by-products from the confines of the building itself. Characteristically, much forethought is given to architectural features and landscaping to further enhance compatibility with adjacent land uses. Industrial parks usually attract these types of industries by providing mutually exclusive zoning or covenants for protection against less restricted industrial uses.

b) Light Industrial Areas

This grouping of industries include those firms which can control their obnoxious effects within the boundaries of the site. This control enables them to locate on medium-size parcels without their being obstrusive or objectionable to neighboring uses. Mutually exclusive zoning is also a desired feature.

c) Wholesaling, Warehousing and Transportation Facilities

It should be noted that there are certain commercial and other non-manufacturing uses, including wholesaling, warehousing, and transportation facilities, which because of their operational aspects, are generally incompatible with other commercial activities and more nearly compatible with industrial uses. These aspects include a large volume of truck traffic, considerable amount of space for storage and/or loading, and often the need for rail access. Depending upon which of these or other aspects are dominant, and also the degree to which varying levels of performance standards can be met, uses within this group might be compatible with those in any other industrial group.

6. General Industrial

This category includes the following areas as defined in the San Joaquin County General Plan:

a) Heavy Industrial Areas

This includes those industries in which the cost of pollution control devices beyond those required to meet minimum standards is prohibitive in view of the economics of their operations. Some obnoxious characteristics such as noise may be unavoidable, although almost all are limited to the area of the site. These firms prefer to seek large parcels of ground on or just outside the fringes of urbanized areas. The space between the plant itself and adjacent uses lessens the effects of the operation, and the fringe locations reduce the conflicts with the urban environment.

b) Open Industrial Areas

While most industrial activities occur within buildings and require open space only for landscaping, parking, loading or some limited storage, there are open industrial uses in which most operations are carried on out-of-doors, or in which the operation depends on large outdoor space for storage of raw materials and finished products, or for the servicing of equipment, trucks, and other heavy vehicles. These types of industrial uses require special controls to ensure compatibility with other land uses, to eliminate hazards and to prevent blight. Included in this category are extractive industries, and some manufacturing, repair, and storage operations such as asphalt batch plants, concrete mixing plants, heavy machinery and equipment repair and storage, and dismantling and wrecking yards.

7. Functional Street Classification

For the purpose of the Circulation Element, the following classifications have been used; Local Street, Minor Collector, Major Collector, Arterial, and Freeway. The functional street system appears on the 1995 Plan Map. Each classification is described below:

(a) Local Street

This provides local access to abutting properties, not intended to accomodate any through traffic, and mainly for the use of only passenger vehicles. Its characteristics are lowest traffic volumes and permitted speeds, involves shortest travel distances, and normal right-of-way width is 50 feet.

(b) Minor Collector

It collects vehicles from local streets and carries these vehicles to the locally important traffic generators and/or major collectors. Its characteristics are fairly low speeds, fronting uses would have direct access, streets are spaced at intervals consistant with population density, and the normal right-of-way width is 60 feet.

(c) Major Collector

Collects traffic from two or more Minor Collectors and carries it to the community center and/or a higher volume trafficway. Its characteristics are medium speeds in urban areas minimized by limiting number of intersections and driveway and by other design features, should not penetrate identifiable neighborhoods, and the normal right-of-way width is 84 feet.

(d) Arterial

This street moves large volumes of relatively high speed traffic between areas that are major traffic generators, such as between communities, and collects traffic from major collectors. Its characteristics include partially limited access, controlled at-grade intersection with other streets, railroad grade separations median strip, and a normal right-of-way width of 110 feet plus frontage roads if necessary.

(e) Freeway

A freeway accomodates high speed, high volume, long distance regional through traffic. It also serves peak traffic loads within and between urban areas, and collects traffic from arterials. Its characteristics include access limited to grade separated intersections with other arterials, access to adjacent uses by frontage or other roads, separation of all conflicting traffic movements, and a normal right-of-way width of 210 feet.

1. General

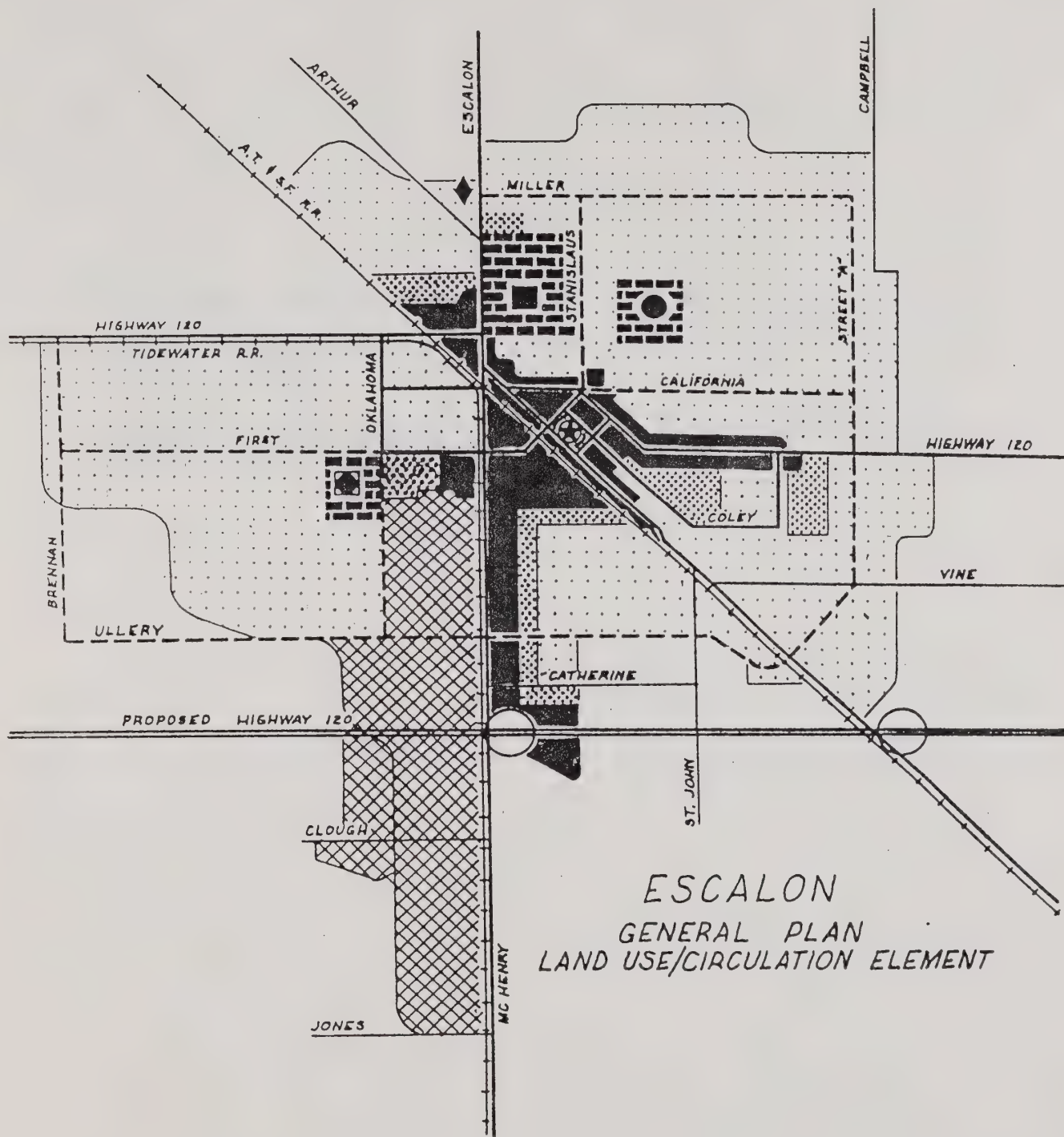
The plan proposal is the implementation of program to achieve the objectives. These are the actions to be taken by the City Council, the Planning Commission and the City Staff.

2. Residential

- (a) To continue with the current planning of new areas annexing to the City will be developed primarily into single family dwelling units on lots of approximately 7,000 square feet in net area.
- (b) Multi-family dwelling units should be built in areas outlined in the Standards section of this Plan.

3. Plans and Ordinances

- (a) Continue with program of annual review of all elements of the current general plan, and review need for additional elements.
- (b) Continue review to identify areas subject to flooding.
- (c) Continue annual review and implementation of five year capital improvement program.
- (d) Continue review and improvement of zoning and subdivision ordinances.
- (e) Prepare plan line map designating rights-of-ways of major streets in advance of development, and encourage and require dedication of streets as part of land development process.



ESCALON GENERAL PLAN LAND USE/CIRCULATION ELEMENT

RESIDENTIAL



LOW DENSITY



MEDIUM DENSITY

COMMERCIAL



INDUSTRIAL



PUBLIC



EDUCATIONAL
FACILITIES



ELEMENTARY SCHOOL



MIDDLE SCHOOL



HIGH SCHOOL



FIRE STATION

OPENSOURCE

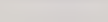


COMMUNITY PARK

CIRCULATION



FREEWAY



ARTERIAL AND
COLLECTOR (EXISTING)



ARTERIAL AND
COLLECTOR (PROPOSED)



INTERCHANGE



RAILROAD

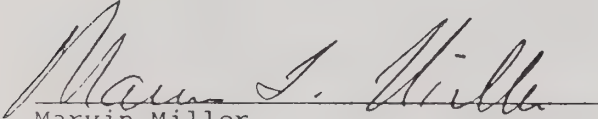
ORIGINAL


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2. General Plan Guideline, California Council on Intergovernmental Relations, September 20, 1973
3. Land Use/Circulation Element, a portion of the San Joaquin County General Plan to 1995, April 13, 1976

Adopted by Resolution No. 77-1 of the Escalon City Planning Commission this
11th day of April, 1977.


ATTEST:

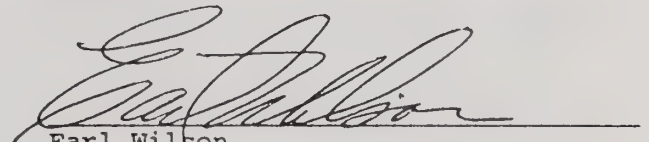

Marvin Miller
Chairman


Earl Wilson
Secretary

Adopted by Resolution No. 445 of the Escalon City Council this 16th day of
January, 1978.

ATTEST:


Frank M. Bodin
Mayor


Earl Wilson
City Clerk

RESOLUTION NO. 77-1

A RESOLUTION OF THE ESCALON CITY PLANNING COMMISSION
RECOMMENDING APPROVAL OF THE LAND USE AND CIRCULATION
ELEMENT OF THE ESCALON GENERAL PLAN

WHEREAS, The Escalon City Planning Commission has studied and prepared the Proposed Revision of the Land Use and Circulation Element of the General Plan for the City of Escalon; and

WHEREAS, a public hearing for the purpose of allowing all persons to be heard for or against the Proposed Revision of the Land Use and Circulation Element was set for the 10th day of January, 1977 at 7:30 p.m., and notice of said hearing was duly published the 29th day of December, 1976 in the Escalon Times; and

WHEREAS, The Escalon City Planning Commission has considered said Proposed Revision of the Land Use and Circulation Element.

NOW, THEREFORE, BE IT RESOLVED BY THE ESCALON CITY PLANNING COMMISSION, as follows:

1. The Planning Commission has found the Proposed Revision of the Land Use and Circulation Element is suitable for the land use and circulation needs for the controlled development of the City of Escalon, and does hereby recommend to the City Council of the City of Escalon the adoption of the Land Use and Circulation Element.

2. That a certified copy of this resolution be forwarded to the City Council of the City of Escalon by the Planning Commission Secretary as the report of the Planning Commission.

PASSED AND ADOPTED this 11th day of April, 1977.

AYES: Commissioners: Blixt, deBie, Latta, Stewart and Chairman Miller

NOES: Commissioners: None

ABSENT: Commissioners: None

ATTEST:

/s/ Marvin Miller
Chairman, Escalon City Planning
Commission

/s/ Earl Wilson
Secretary, Escalon City
Planning Commission

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ESCALON
ADOPTING THE LAND USE AND CIRCULATION ELEMENTS UPDATE OF
THE ESCALON GENERAL PLAN.

WHEREAS, the Escalon City Planning Commission has studied and approved the Land Use and Circulation Elements Update of the Escalon General Plan; and

WHEREAS, a public hearing was duly noticed before the City Council for November 21, 1977 by publication in the Escalon Times on November 9, 1977; and

WHEREAS, the public hearing was continued to December 5, 1977.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Escalon, as follows:

1. That the Land Use and Circulation Elements Update of the Escalon General Plan is hereby approved.

2. That the Land Use and Circulation Elements Update shall be endorsed by signature of the Mayor of the City of Escalon, attested by the City Clerk of the City of Escalon, to show that it has been adopted by the City Council.

PASSED AND ADOPTED this 16th day of January, 1978 by the following vote:

AYES:	Councilmen:	Focha, Vilen and Mayor Bodin
NOES:	Councilmen:	None
ABSENT:	Councilmen:	Hagan

/s/ Frank M. Bodin
Frank M. Bodin, Mayor

ATTEST:

/s/ Earl Wilson
Earl Wilson, City Clerk

CITY OF ESCALON
GENERAL PLAN
SEISMIC SAFETY ELEMENT

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SEISMIC SAFETY ELEMENT OF THE ESCALON GENERAL PLAN

I

INTRODUCTION

A. General

This Seismic Safety Element presents a general analysis of the natural seismic conditions existing and/or influencing the Escalon area. It will be used as the basis for developing and implementing programs to protect the health, safety and welfare of the populace caused by seismic activity. This element contributes information on the risk or safety involved in using and developing lands of different seismic characteristics within the Escalon Planning Area for various purposes, types of structures, and occupancies. It thus provides additional input to the land use, open space, circulation and safety elements.

B. Legislative History

The California Legislature has foreseen the need to reduce loss of life, injuries, damage to property, and economic and social dislocation resulting from future earthquakes. By requiring the seismic safety element, they have placed specific responsibilities on local government for identification and evaluation of seismic hazards and the formulation of programs and regulations to reduce risk.

The specific authority for preparation of the seismic safety element is California Government Code Section 65302(f) which states that the general plan shall include:

"A seismic safety element consisting of an identification and appraisal of seismic hazards such as susceptibility to surface ruptures from faulting, to ground shaking, to ground failures, or to effects of seismically induced waves such as tsunamis and seiches."

"The seismic safety element shall also include an appraisal of mudslides, landslides, and slope stability as necessary geologic hazards that must be considered simultaneously with other hazards such as possible surface ruptures from faulting, ground shaking, ground failure and seismically induced waves."

C. Preparation History

Preparation of the seismic safety element applicable to San Joaquin County has been completed by the San Joaquin County Council of Governments and adopted June 26, 1973. Preparation of Escalon's element was by extraction from the COG's element of those portions applicable to the Escalon area. A summary of the findings in the COG element will be used in this element. Further information resulting in the findings may be reviewed in the COG element.

D. Definitions

Listed below are terms used in this element. Some of these may be further defined elsewhere in the text.

Seismic. Pertaining to or caused by earthquakes.

Seismic Hazards. Hazards related to seismic or earthquake activity.

Tectonic. Forms, forces and movements resulting from deformation of the earth's crust. Movement may be rapid resulting in earthquake or slow (tectonic creep).

Fault. A break in the earth's crust where movement has taken place.

Active Fault. Faults that have moved during historic time or which through geologic evidence are deemed likely to move during the useful life of a structure (or community).

Inactive Fault. Faults showing no evidence of movement in recent time. (Note: definitions of "active" and "inactive" vary in relation to type of use and structure).

Surface Ruptures from Faulting. Breaks in the ground surface resulting from fault movement.

Ground Shaking. Shaking of the ground resulting from sudden fault movement.

Ground Failures. Includes mudslide, landslide, liquefaction and subsidence.

Soil Liquefaction. Change of water saturated cohesionless soil to liquid, usually from intense ground shaking; soil loses all strength.

Tsunamis. Earthquake induced ocean waves, often called "tidal wave."

Seiches. Earthquake induced waves in lakes and ponds.

Richter Magnitude Scale. A measure of the amplitude of the seismic waves at its source. This scale has no fixed minimum or maximum, however, a quake on the magnitude of 2 is the smallest quake normally felt by humans, and observations have placed the largest in the world at 8.9.

Modified Mercalli Intensity Scale of 1931. A partly subjective measure which depends on the effects of a quake such as damage at a particular location. The scale value ranges from I to XII, I - not felt except by very few, favorable situated, XII - damage total, lines of site disturbed, objects thrown into the air. While an earthquake has only one magnitude, it can have many intensities, which decrease with distance from the epicenter.

RESEARCH

A. Identification and Appraisal of Seismic HazardsFaults and Epicenters.

The faults located within San Joaquin County include the Tracy-Stockton Fault, the Black Butte Fault, the Telsa Fault, the Patterson Pass Fault, and the Midland Fault. The Tracy-Stockton Fault passes from near Tracy to directly beneath (and beyond) Stockton in a northeasterly direction. Subsurface data indicates that no appreciable movement has occurred on this fault since Mid-Pliocene time, perhaps five million years ago or more, however, there is a serious question as to the inactivity of this fault. Three known epicenters have been located near this fault in the central part of San Joaquin County. The purpose of this point is to indicate earthquakes can be generated in the middle portion of the County.

The Black Butte and the Tesla Faults are located in the extreme southwest corner of San Joaquin County. There is no recorded evidence of any activity on either of these faults

The Patterson Pass Fault trends northwestward from the San Joaquin-Alameda County boundary toward the Altamont and Livermore. It seems unlikely that this small fault presents a significant seismic threat to San Joaquin County in comparison with the San Andreas system.

The Midland Fault crosses a small portion of the northwest part of the County. This fault is relatively inactive and the effects of earthquakes on the San Andreas, Calaveras, Hayward, or Tracy-Stockton Faults are considered far more significant.

Outside the County are a number of faults which are definitely known to be active. The San Andreas system is the most widely known. This system comprises several individually named fault zones in the San Francisco Bay area, the principal ones being the San Andreas, Hayward, and Calaveras.

East of San Joaquin County the Melones Fault and the Bear Mountain Fault have been identified. These are not judged to pose a seismic threat to the County.

Historically, very little seismic activity has occurred in San Joaquin County in comparison to other parts of California. The major seismic hazard to San Joaquin County is the motion resulting from seismic disturbances on distant large fault systems, including the San Andreas, Calaveras, and Hayward Faults. From all information that has been made available to the City of Escalon, there appears to be no active fault in the Escalon General Plan area, however, the area is susceptible to the effects of seismic activity.

Figure 1 is a seismic index map showing the relationship of San Joaquin County to major active faults in California. This index map shows epicentral locations of seven historic (1836-1906) earthquakes that have affected San Joaquin County with an intensity sufficient to cause significant property damage and frighten many people. The map also locates epicenters of lesser earthquakes that are revelant. Seismic Table I summarizes historical maximum earthquake magnitudes for the fault zones that are likely to most significantly affect San Joaquin County. It should be emphasized that recorded data are not sufficient to provide precise occurrence intervals of the "maximum probable" earthquake.

In order to provide a basis for planning and design, the "maximum probable" earthquake describes the largest earthquake which can reasonably be expected to occur. Estimates of the recurrence interval of such events can be made, based on historic records. However, it should be emphasized that recorded data are not sufficient to provide precise recurrence intervals of the "maximum probable" earthquake. Key structures (hospitals, schools, stadiums, fire stations, high-rise buildings, etc.) should be designed according to the maximum probable event.

Ground Shaking.

The consequences of strong shaking are of greater significance over a far wider area than are the consequences of local ground rupture due to fault movements. All earthquakes of the last hundred years have shown that the great preponderance of damage is caused primarily by strong ground shaking rather than local surface rupture.

For the Escalon area, the most probable sources of strong ground motion are the San Andreas Fault, the Hayward Fault, the Calaveras Fault, and the Tracy-Stockton Fault. Each of these sources, and other potentially active faults, could generate ground shaking with different frequencies, accelerations, velocities and durations. The intensity of the ground shaking at any one place, for a given earthquake, is a fraction of its magnitude, hypocentral distance, and the dynamic properties of rock and soil along the transmission path of its seismic waves.

There is insufficient data available on the dynamic properties of the subsurface soils in San Joaquin County to precisely define the characteristics of the "maximum probable" earthquake at ground surface. However, some general observations can be made.

- a. The depth of soil overlying "rock-like" material varies within the County from less than 100 feet to a depth in the range of 1,000 to 2,000 feet. The natural earth material present in the Escalon area can be expressed physiographically as the Valley Floor Region. It comprises the area bounded by the Sierra Nevada Range on the east and the Delta and Diablo Range on the west. This entire region is underlain by surficial deposits of

(Continued on Page 7).

Figure 1

LEGEND

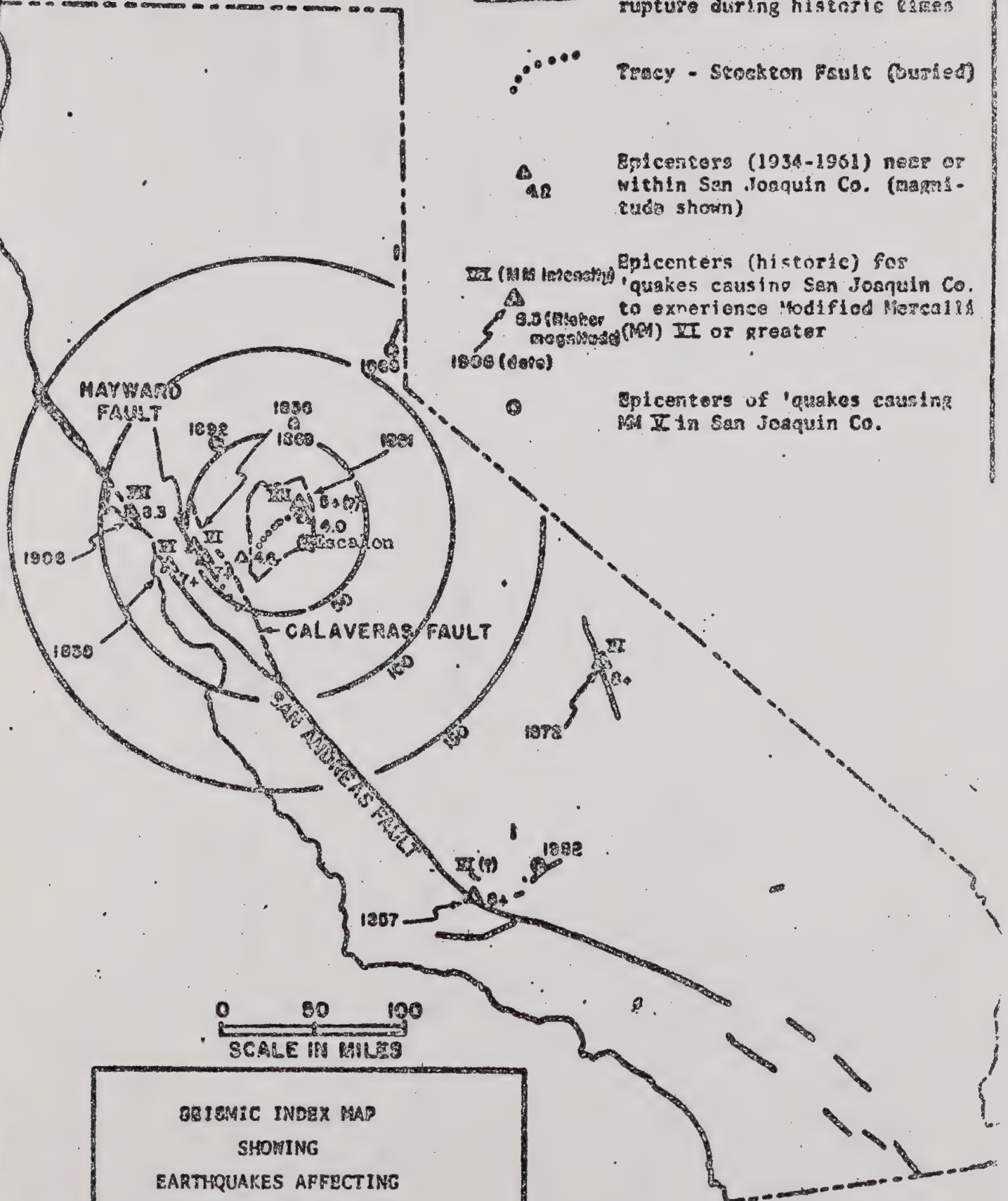
Faults with reported surface rupture during historic times

Tracy - Stockton Fault (buried)

Epicenters (1934-1961) near or within San Joaquin Co. (magnitude shown)

Epicenters (historic) for 'quakes causing San Joaquin Co. to experience Modified Mercalli (MM) VI or greater

Epicenters of 'quakes causing MM V in San Joaquin Co.



SEISMIC INDEX MAP
SHOWING
EARTHQUAKES AFFECTING
SAN JOAQUIN COUNTY

SEISMIC TABLE I

<u>Fault Zone</u>	<u>Distance (to Stockton, in Miles)</u>	<u>Historical Maximum Richter Magnitude</u>	<u>Maximum Probable Event</u>	<u>Recurrence Interval of the Maximum Probable Event +</u>
San Andreas	70	8.3	8.3	Considered together: 50-200 years Last event: 1906
Hayward	50	7+	8.3	
Calaveras	40	Less than 6	8.3	
Tracy-Stockton	Within City Limits	5 (estimated)	5+	Unknown

+Wallace, R.E., "Earthquake Recurrence Intervals on the San Andreas Fault," G.S.A.
Bulletin, Vol. 81, pp. 2875, 1970.

unconsolidated and semi-consolidated alluvium consisting of gravels, sands, silts, and clays. The alluvial material grades downward into older, well-consolidated sedimentary rocks.

- b. In general, deep deposits of soft soils tend to produce ground surface motions having predominantly long-period characteristics. Such long-period motions have maximum effect on long-period structures and lesser effects on low, stiff, short-period structures.
- c. Therefore, in general, the ground surface motions expected in the Escalon area will tend to be long-period motions.

A Preliminary Map of Maximum Expectable Earthquake Intensity in California is shown on page 20 of Bulletin 198 of the California Division of Mines and Geology title "Urban Geology Master Plan for California." The Escalon area is shown to be in a low severity zone with probable maximum intensity of VI or VII on the Modified Mercalli Scale of 1931. The severity zone increases west of the Stockton-Modesto Area.

Tsunamis

Tsunamis commonly called "tidal waves" or "seismic sea waves," long period water waves that frequently are seismically or tectonically induced. The height (amplitude) of these waves on the open ocean is on the order of only a few feet. However, the amplitude of the waves increase as they approach shallower water. This increase in height is due to loss of velocity. As the velocity decreases, the kinetic energy of the wave is taken up by increasing its amplitude. The amplitude of such waves has been known to exceed 100 feet. Like other waves, these waves can be refracted.

Tsunamis that enter San Francisco Bay do not tend to create resonance. Instead, the waves enter and are rapidly dissipated. Recent studies by the U. S. Geological Survey suggest a maximum tsunami wave height in San Francisco Bay on the order of 20 feet. This study concludes that a tsunami would have an effect as far as Carquinez Straits. It is therefore concluded by the C.O.G. Seismic Safety Element that the tsunami hazard to San Joaquin County is very small.

Seiches and Surges

Seiches are periodic oscillations of water level in basins, harbors, bays, channels, rivers, or other bodies of water. They are primarily a result of tsunamis, wind and weather changes, seismically induced ground waves, landslides, and tectonic tilting. A related effect is the oscillations that can occur in water tanks, both elevated and grade-supported, during earthquakes.

A related phenomenon is known as a surge. A surge is similar to a seiche but has larger amplitude and is generally more violent.

Slope Stability

The down-slope movement of earth materials, often referred to as mass movements (i.e. creep, soilflows, landslides, rockfalls, etc.) is a normal geologic process by which slopes are flattened and valleys are widened. The rate of down-slope movement ranges from very rapid rockfalls to the very slow, imperceptible movements termed soil creep and bedrock creep. Early recognition of areas susceptible to larger scale mass movement can significantly reduce the threat of damage and injury in the land-use planning and design process.

The findings of the C.O.G. Seismic Safety Element show the Escalon area, which is relatively flat, to be in a zone least susceptible to slope failure.

Subsidence

Subsidence is a general lowering of the ground surface over a large area. Areal subsidence can be caused by many factors, including removal of fluids, such as oil, gas, or water from beneath the ground surface, by tectonic activity, or by loading. Areal subsidence is occurring within various parts of the County and is documented in reports by the Department of Water Resources. The potential for ground subsidence due to earthquake motion is largely dependent on the magnitude, duration, and frequency of the earthquake waves. It is expected that the most likely type of earthquake motion in San Joaquin County would be long period rolling-type motion rather than intensive high frequency shaking subsidence or differential settlement would be less likely to occur under these conditions; therefore, the potential for ground subsidence or "shakedown" due to earthquakes is considered to be relatively low for San Joaquin County.

Liquefaction

Soil liquefaction is the phenomenon in which a water saturated cohesionless soil temporarily loses its strength when subjected to dynamic forces. The soils which are primarily vulnerable to liquefaction are saturated sands in loose to medium-dense condition. Clayey soils are generally not subject to this phenomenon, except for certain "sensitive" clays. The findings of the C.O.G. Seismic Safety Element indicate that the east portion of the County, including the Escalon area, is considered less susceptible to liquefaction because the groundwater table is deep.

B. Methods of Reducing Seismic Related Hazards and Injuries.

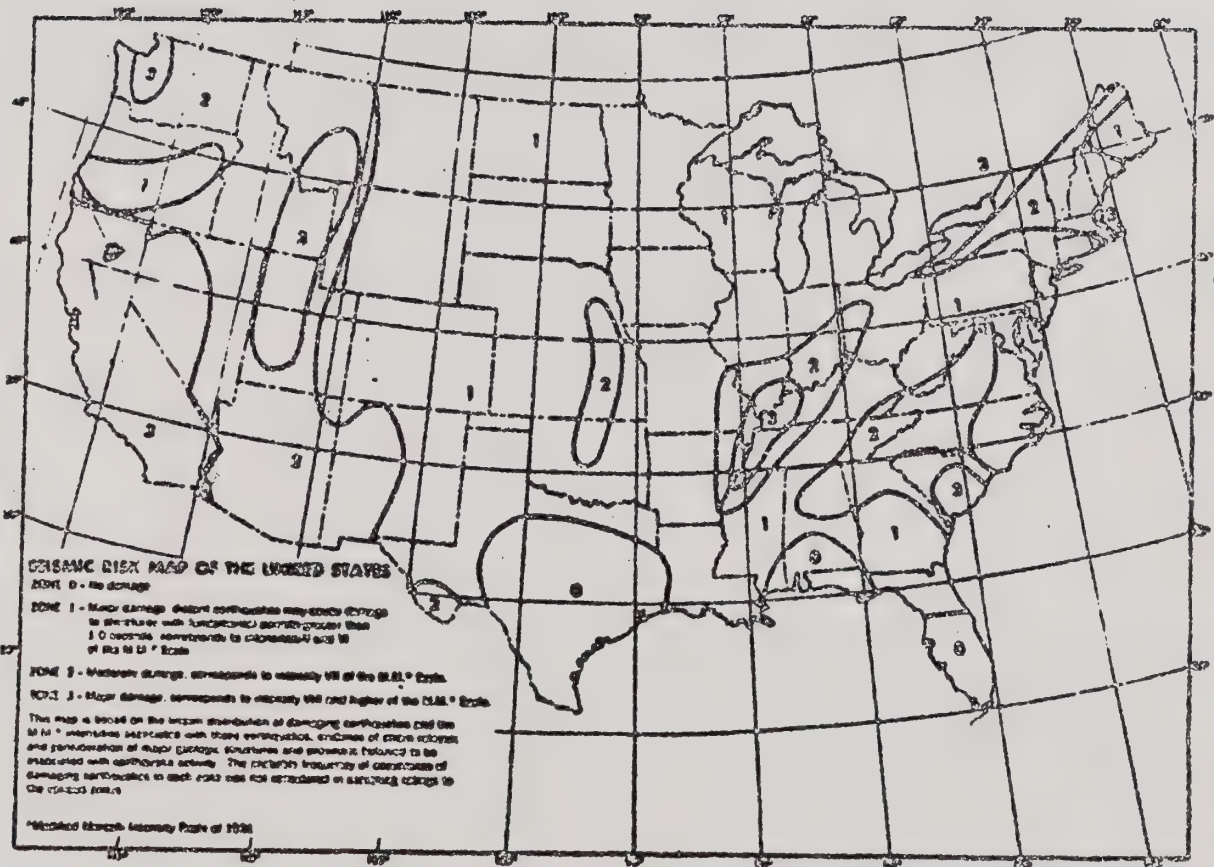
General. Outlined below are some of the various methods that may be used to reduce hazards and injuries as related to seismic activity. Only listed are some of those applicable to the Escalon area, therefore, this does not represent all measures that are available throughout California.

Uniform Building Code. The "Uniform Building Code," Volume I, published by the International Conference of Building Officials, provides minimum standards to safeguard the public health, safety and welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures. This Code is revised every three years, and the 1970 Edition currently serves the City of Escalon for building regulation. Portions of the Code relate directly to standards for earthquake safety. A seismic risk map is used for this purpose, and lists zones ranging from 0 - no damage to 3 - major damage. The zone has a bearing on the types of materials used, and the method of construction for structures. Escalon is shown on the borderline to Zones 2 and 3. This borderline confusion is eliminated in the 1973 edition of the Code which places all of California in zone 3. (See Map on Page 10) This zone corresponds to intensity VIII and higher on the Modified Mercalli Intensity Scale. The map in the 1973 edition of the Code conflicts somewhat with the Maximum Expectable Earthquake Intensity Map of the Division of Mine and Geology bulletin described earlier, however by having the whole state in the same zone, architects and engineers from throughout the state can better serve the Escalon area knowing a different set of standards do not exist which would require further research. Zone 3 is the maximum zone for design purposes.

Emergency Services Operational Plan. The City of Escalon has adopted and updated an emergency services plan establishing an organization, staffing means, and task assignments, to provide emergency services in the event of natural or man-made disasters. The plan is general and addresses itself to all types of disasters without special considerations for those of a specific type. The Plan is periodically updated and can be reviewed for seismic related events during the next revision process.

Public Information. The former Office of Emergency Preparedness, which is presently being reorganized, has issued several publications related to individual preparedness for various types of disasters. Included in these publications have been mentioned readiness for earthquakes. "In Time of Emergency: A Citizen's Handbook on Nuclear Attack and Natural Disasters," and "In Time of Emergency (Spanish Version)," are available in this City for general distribution.

Various types of information are made available on the Federal, State and local levels by those responsible for emergency preparedness. This information when received by the City can be made available to Escalon's citizens through newspaper articles and mailings.



SOURCE: 1973 Uniform Building Code

III

ASSUMPTIONS OF THE SEISMIC SAFETY ELEMENT

The following are characteristics of the future development of the Escalon area arrived at by consensus without substantiating information and which will supposedly occur during the planning period.

1. That economic development and population will increase significantly in the future.
2. That seismic activity can occur without warning.
3. That seismic related activity can affect all parts of the Escalon area equally.

IV

STATEMENT OF DEVELOPMENT POLICIES

A. Seismic Safety Objectives

1. To secure the highest possible degree of public protection to reduce loss of life, property, social activity and economic activity from the events of seismic activity.
2. To plan and keep emergency services operative on a continuous basis in the events of seismic activity.

B. Seismic Safety Guiding Principals

1. The personal safety of all residents should take precedence over survivability of structures.
2. Structures utilized for large numbers of occupants, e.g. schools, stadiums, hospitals, etc., should be designed to protect human life to the highest degree possible during a "maximum probable event" of seismic activity.
3. Structures designated for command control of emergency/disaster services should be designed to withstand a "maximum probable event" and remain operational.
4. Structures designated as emergency/disaster medical facilities should be designed to withstand a "maximum probable event" and remain operational.
5. All other structures should be designed or modified to protect human life during and after a "maximum probable event."
6. Emergency services should be made continuously available to handle the various types of situations that arise from the events of seismic activity.

C. Standards

1. Sections 2313 and 2314, 1973 Edition of the Uniform Building Code. Seismic related standards for structural features and Earthquake Zones for construction purposes are established.
2. Section 3704(c), 1973 Edition of the Uniform Building Code. This section regulates the anchorage of chimneys in the various earthquake zones.
3. Emergency Services Operation Plan, City of Escalon, adopted June 21, 1971. This plan establishes the emergency services organization, and the procedure to handle various types of emergencies.

D. Plan Proposal

1. Adopt 1973 Edition of the Uniform Building Code.
2. Inventory vulnerable structures to identify those structures which are likely to fail during an earthquake. This inventory should be conducted by the building regulation department.
3. Those structures identified for utilization as disaster control and medical support should be reviewed for capability of withstanding the effects of a maximum probable seismic event.
4. Support a study to determine the effects of seiches in the large reservoirs which hold back rivers draining into the County.
5. Review and update the Emergency Services Operation Plan for the City of Escalon.
6. Continue the dissemination of public information concerning individual preparedness relating to seismic activities.

Adopted by Resolution No. 73-2 of the Escalon City Planning Commission this 10th day of September, 1973.

ATTEST:

/s/ Effie Latta
Effie Latta
Chairman

/s/ Earl Wilson
Earl Wilson
Secretary

Adopted by Resolution No. 347 of the Escalon City Council this 15th day of October, 1973.

ATTEST:

/s/ Jack P. Hanlon, Jr.
Jack P. Hanlon, Jr.
Mayor

/s/ Earl Wilson
Earl Wilson
City Clerk

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Emergency Services Operational Plan. City of Escalon,
June 21, 1971

Uniform Building Code, Volume I. International Conference
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Urban Geology Master Plan for California

Bulletin 198 California Division of Mines and Geology,
Sacramento, California, 1973

RESOLUTION NO. 73-2

A RESOLUTION OF THE ESCALON CITY PLANNING COMMISSION
RECOMMENDING APPROVAL OF THE SEISMIC SAFETY ELEMENT
OF THE ESCALON GENERAL PLAN.

WHEREAS, The Escalon City Planning Commission has studied and prepared the Proposed Seismic Safety Element of the General Plan for the City of Escalon; and

WHEREAS, a public hearing for the purpose of allowing all persons to be heard for or against the Proposed Seismic Safety Element was set for the 10th day of September, 1973 at 7:30 P.M., and notice of said hearing was duly published the 20th day of August, 1973 in the Escalon Times; and

WHEREAS, the Planning Commission has considered said Proposed Seismic Safety Element.

NOW, THEREFORE, BE IT RESOLVED BY THE ESCALON CITY PLANNING COMMISSION, as follows:

1. The Planning Commission has found the Proposed Seismic Safety Element is suitable for the Seismic Safety needs for the controlled development of the City of Escalon, and does hereby recommend to the City Council of the City of Escalon the adoption of the Proposed Seismic Safety Element.

2. That a certified copy of this resolution be forwarded to the City Council of the City of Escalon by the Planning Commission Secretary as the report of the City of Escalon by the Planning Commission Secretary as the report of the Planning Commission.

PASSED AND ADOPTED this 10th day of September, 1973.

AYES: Commissioners: Debie, Silva, Stewart and Chairman Latta.

NOES: Commissioners: None.

ABSENT: Commissioners: Blixt.

/s/ Effie Latta
Chairman, Escalon City
Planning Commission

ATTEST:

/s/ Earl Wilson
Secretary, Escalon City
Planning Commission

A RESOLUTION OF THE CITY COUNCIL OF THE CITY
OF ESCALON ADOPTING THE SEISMIC SAFETY
ELEMENT OF THE ESCALON GENERAL PLAN.

WHEREAS, the Escalon City Planning Commission has studied and approved the Seismic Safety Element of the Escalon General Plan; and

WHEREAS, a public hearing was duly noticed before the City Council for October 1, 1973, by publication in the Escalon Times on September 19, 1973;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ESCALON, as follows:

1. That the Seismic Safety Element of the Escalon General Plan is hereby approved.

2. That the Seismic Safety Element shall be endorsed by signature of the Mayor of the City of Escalon, attested by the City Clerk of the City of Escalon, to show that it has been adopted by the City Council.

PASSED AND ADOPTED this 15th day of October, 1973 by the following vote:

AYES: Councilmen: Bodin, Hagan, Schulz, Vilen and Mayor Hanlon.

NOES: Councilmen: None.

ABSENT: Councilmen: None.

/s/ Jack P. Hanlon, Jr.
Jack P. Hanlon, Jr., Mayor

ATTEST:

/s/ Earl Wilson
Earl Wilson, City Clerk

CITY OF ESCALON
GENERAL PLAN
NOISE ELEMENT
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NOISE ELEMENT OF THE ESCALON GENERAL PLAN

I

INTRODUCTION

A. General

This Noise Element presents a general analysis of noise conditions existing and/or influencing the Escalon area. It will be used as the basis for developing and implementing programs to protect the health, safety and welfare of the populace caused by noise creating activities. The noise element is associated closely with the circulation, land use and housing elements, since it provides noise level standards related to the compatibility of land use. It clarifies and supplements the policies and maps adopted in the Escalon General Plan. This element will also be used to review and update all elements in the General Plan to keep the document internally consistent.

B. Legislative History

Sudden attention is being focused on noise problems. This has been caused by the recent realization that noise levels in cities are growing at a rate of one decibel every 10 years, that hearing loss among Americans is accelerating, and because noise sources have increased phenomenally and spread into what were, until recently, very quiet areas.

The Federal and state governments have recognized this problem. The Federal Government passed the Noise Control Act of 1972 which authorized the Environmental Protection Agency (EPA) to set noise emission limits for noisy products. The State of California has in effect noise limits on the sale and use of motorized vehicles. Sound barriers around freeways are increasing. Noise Elements are required to be included as part of local general plans.

The specific authority for preparation of the noise element is California Government Code Section 65302(g) which states that the general plan shall include:

"A noise element in quantitative, numerical terms, showing contours of present and projected noise levels associated with all existing and proposed major transportation elements. These include but are not limited to the following:

1. Highways and freeways,
2. Ground rapid transit systems,
3. Ground facilities associated with all airports operating under a permit from the State Department of Aeronautics.

"These noise contours may be expressed in any standard acoustical scale which includes both the magnitude of noise and frequency of its occurrence. The recommended scale is sound level A, as measured with A-weighting network of a standard sound level meter, with corrections added for the time duration per event and the total number of events per 24-hour period.

"Noise contours shall be shown in minimum increments of five decibels and shall be continued down to 65 db(A). For regions involving hospitals, rest homes, long-term medical or mental care, or outdoor recreational areas, the contours shall be continued down to 45 db(A).

"Conclusions regarding appropriate site or route selection alternates or noise impact upon compatible land uses shall be included in the general plan.

"The state, local, or private agency responsible for the construction or maintenance of such transportation facilities shall provide to the local agency producing the general plan, a statement of the present and projected noise levels of the facility, and any information which was used in the development of such levels."

C. Preparation History

Preparation of the noise element applicable to San Joaquin County has been completed by the San Joaquin County Council of Governments (COG) and adopted July 23, 1974. Preparation of Escalon's element was by extraction from the COG's element those portions applicable to the Escalon area. A summary of the findings in the COG element will be used in this element. Further information resulting in the findings may be obtained in the COG element.

D. Definitions

Listed below are terms used in this element. Some of these may be further defined elsewhere in the text.

Sound intensity. A measure of the loudness of sound.

Noise contour. A line on passing through points where the same sound intensity level prevails. Contours form bands of varying width emanating from a noise source.

Decibel. A unit for measuring the relative loudness of sounds detectable by the human ear, abbreviated dB. An "A" suffix indicates a weighting to correspond more closely how people perceive sound.

Adjacent. Where peak sound levels from the major transportation route exceed 60 dBA. As a general guideline this would be approximately:

- a) 1000 feet either side of high speed truck routes at grade.
- b) 450 feet either side of low speed (25-35 mph) truck routes at grade.
- c) 140 feet either side of low speed (25-35 mph) automobile-only routes at grade.
- d) 270 feet either side of high speed truck routes depressed 20 feet.
- e) 700 feet either side of high speed truck routes elevated 20 feet.
- f) 2,700 feet either side of a railroad track.

Adversely affect. As defined in League of California Cities Model Noise Ordinance, i.e., no more than 5 dBA above the ambient for more than five minutes out of any one hour, up to 10 dBA above the ambient 1-5 minutes out of an hour and up to 15 dBA above the ambient 0-1 minutes out of an hour, with corrections for disturbing qualities.

Commercial or industrial areas. Where commercial or industry exists.

Major noise sources. Major roads as defined, railroads with more than four operations per day, railroad switchyards, public access airports, public and private industrial and commercial use areas and commercial heliports.

Major roads. All existing or proposed roads, carrying or designed to carry more than 100 trucks per day or 5,000 vehicles per day.

Residential. Places where people live and sleep. Includes but is not limited to single family dwellings, apartments, institutions, mobilehomes and group quarters.

Residential area. Where, within a 60 dBA contour on either side of a major road there are 13 or more separate detached dwelling houses (including apartments, group quarters, mobilehomes, institutions) in a row within a distance of a quarter of a mile.

Trucks. Includes all trucks with three axles or more, and two axle trucks with dual rear axles. This excludes light pickups and vans.

RESEARCH

A. Identification and Appraisal of Sound

Introduction. The nature of sound must be understood in order to evaluate a portion of it called noise. Noise is a subjective judgement to each individual. Technical sound information, hearing, effects of noise, and noise analysis in the Escalon area will be reviewed. With this information, a plan can be developed for the reduction of a certain level of unwanted sound.

Technical Sound Information. Sound is a wavelike vibration transmitted by air. Each sound wave produces a minute pressure compression and expansion upon the air. The loudness of a sound depends on the pressure the soundwaves exert. The more pressure, the louder the sound.

The range of sound pressure the ear hears is tremendously wide. Sound pressure levels are measured in decibels (dB) calculated on a logarithmic basis. Zero dB is the threshold of hearing, and the ear begins to feel pain about 120dB. Chart I is an example of estimates of various sounds and their effects.

At low sound pressure levels the ear can detect very small increases in sound pressure. At high levels, a much larger increase in sound energy is necessary for the ear to distinguish the increase.

An average person will perceive a 10dB increase at any level as a doubling in loudness. Thus 90dB will sound twice as loud as 80dB and four times as loud as 70dB.

Combining two identical sound sources increase the overall sound level by 3 decibels, thus 40dB + 40dB = 43dB. If one source is more than 10dB above another, the lesser noise adds practically nothing to the overall sound level.

Sound drops off 6 decibels for every doubling of distance. If there are barriers in the way, volume will be further reduced, depending on height, length, type of construction, and air leaks.

Frequency determines the pitch of sound. High frequency sounds have short wavelengths, vibrate rapidly and sound high to the ear. Low frequency sounds have long wavelengths, vibrate slowly and sound low to the ear. Most sounds are composed of many frequencies which are weighted by the ear to produce what sounds like one sound level: its pitch.

Each sound wave is called a cycle. Frequency is expressed in cycles per second or Hertz (Hz).

The human ear can hear frequencies from about 20 to 20,000 Hz. Most speech is concentrated in the 500-2000 Hz range.

The ear does not hear all frequencies equally well. When modified by what is called an "A" weighting, the decibel scale, abbreviated dB(A) corresponds more closely to how people perceive sound.

Chart 1

DECIBEL REFERENCE CHART

<u>Sound Source</u>	<u>Decibels</u>	<u>Noise Effects</u>
Jet Plant (100 ft.)	130	
	120	Painfully loud, rapid hearing loss.
Rock Music	110	Amplified discotheque music.
Automatic Punch Press (3 ft.)		
Shout (6 inches)	100	Maddening sound
Jackhammers (50 ft.)		
Diesel Locomotive (50 ft.)		
Motorcycle (50 ft.)	90	Federal Industrial 8 hour exposure limit
Heavy truck (50 ft.)		
Power Lawn Mower		
10-HP Outboard (50 ft.)	80	Noise annoying, level of loud speech
Standard Passenger Car (50 ft.)		
Interior of Department Store	70	Noise level for potential hearing loss begins; hard to use phone. Stress reactions become obvious.
Air Conditioner (20 ft.)	60	Noise intrudes on normal speech at distances greater than eight feet.
	50	Quiet daytime suburban
Average business office		
Living Room (no T.V.)	40	
Bedroom		Sleep undisturbed
Whisper (15 ft.)	30	
Broadcast Studio	20	Very quiet
	10	Sound just audible
	0	Hearing limit

Other factors affecting people's reaction to a sound are whether it is steady, fluctuating, or impulsive and whether it is "broadband" (fan, community background noise), "narrow band" (electric saw), or "pure tone" (tuning fork). Pure tone sounds are composed of only one frequency and are piercing. If a sound has "information content", such as music or speech, it will distract at lower sound levels than most other types of sound.

"Unwanted sound" is noise.

Hearing, Hearing Loss, and Speech Interference.

1. Hearing. The function of the ear is to convert sound energy into nerve impulses. As sound waves enter through the outer ear and eardrum, the middle ear muscles contract or expand to increase or diminish sounds entering the delicate inner ear. However, this middle ear reflex is imperfect since it cannot adequately protect the inner ear against very loud, impulsive or sustained noises.

When sounds are too intense and prolonged, the hearing receptor cells, or "hair cells" can be damaged. The inner ear (cochlea) is a coiled tube about 34 millimeters long, containing about 17,000 hair cells.

2. Hearing loss. Hearing loss can occur along parts or all of the cochlea. Thus, the degree of hearing loss depends not only on the severity of injury at any one location, but upon the spread of hearing loss in the inner ear.

Hearing loss usually occurs above speaking ranges and spreads downward. Damage can therefore be substantial before hearing loss is noticed.

Most scientists believe noise levels of 70dBA or more contribute to loss of hearing over a lifetime. Clear evidence is available that noises above 80dBA can contribute to inner ear damage and eventually hearing loss if they are frequently and regularly encountered. Trucks, trains, sport cars, and motorcycles all exceed 80dBA at 50 feet. Amplified music at close range may reach 120dBA. In industry, excessively loud machinery is often the norm.

The number of such loud noise sources has grown phenomenally in the last 20 years. Numbers of trucks and cars have more than doubled, commercial jets increased from 0 in 1955 to nearly 2000 in 1970. Appliances, recreational vehicles, power lawn mowers, all contribute to a noisier environment.

Between 9 and 11 million people in the U.S. are presently estimated to have some degree of hearing loss, and the rate of hearing loss is increasing in part due to increased societal noise levels.

Even where daily exposure to community noises may not pose a distinct hazard in itself to hearing, it may increase individual hearing loss by making it impossible for a worker in a noisy factory to find enough off-job quiet to allow the ears to recover each evening.

Hearing loss can be eliminated if exposures to noise are held to sufficiently low levels, held to sufficiently short durations, and allowed to occur only rarely. But regulation of a person's total exposure to noise is impossible to achieve. Reducing noise levels of the noise procedures is a better approach. Clearly, quieting all noise sources to 70 dBA or less is impossible at present. On the other hand, allowing loud noise sources to continue to proliferate without bound would lead to far greater problems in terms of hearing loss and other adverse effects of noise. As a goal from a hearing conversation standpoint, it is desirable to have as few noise sources as possible which expose people to sound levels in excess of 70 dBA.

3. Speech interference. Another direct effect of noise is masking, where unwanted sounds interfere with wanted signals, such as speech. Speech interference begins occurring at about 40-45 dBA and becomes severe at 60 dBA and above. In a highly intellectual, technical society, speech communication plays an important role. Excessive background noise can reduce the amount and quality of verbal exchange and adversely affect education, family life styles, occupational efficiency and the quality of relaxation.

Non-Auditory Effects of Noise on People and Annoyance Response. Non-auditory effects of noise on people include sleep interference, physical reactions, adverse effects on human performance and learning, loss of privacy, anxiety and psychological disorders, and annoyance.

1. Sleep Interference. To protect a person from sleep interference, sound levels should not rise above 35-40 dBA. Whether a person is actually awakened by a particular noise will depend on noise level, characteristics of the noise, stage of sleep, the person's motivation to awake, age, sex, amount of accumulated sleep and so on. Elderly people are particularly susceptible to sleep interference.
2. Physical Reactions. Temporary physical reactions to passing noises include:
 - (at most levels)
 - an orientation reflex,
 - a startle reflex;
 - (at about 70 dBA or above)
 - constriction in the peripheral blood vessels;
 - acceleration or deceleration of the heart rate;
 - dilation of pupils of the eye;
 - changes in breathing patterns;
 - changes in movement of the gastrointestinal tract;
 - changes in secretion of saliva and gastric juices;
 - chemical changes in the blood and urine;

(at higher levels)

- loss in visual acuity;
- disturbance of equilibrium.

It is proposed, and evidence exists, that chronic arousal of such physical responses could aggravate the incidence of medical problems such as headaches, fatigue, digestive disorder, heart disease, blood circulatory disorders, and equilibrium disorders.

It is also proposed that noise as a source of stress is a likely contributor to what many medical authorities believe are stress-related diseases such as ulcers, high blood pressure, heart disease and arthritis.

As a source of stress, noise may also be a contributing factor in mental illness, anxiety, and psychological distress.

3. Performance. Work performance can be adversely affected by noise through distraction and through the physical reactions previously described. While noise does not seem to have an effect on over-all productivity, it can reduce accuracy of work, particularly of complex tasks, and inhibit learning. Even if it does not do this, the price may be increased fatigue and irritability on the part of the employee or student.
4. Privacy. As a result of a lack of acoustical privacy, people may experience annoyance, sleep interference, speech interference and all other detrimental effects of noise. Nearly everyone has experienced this effect at one time or another in apartments, hotels or motels.
5. Psychological. Facts clearly support the contention that noise can be a source of psychological distress through annoyance, speech and sleep interference, etc. This distress in turn can lead to instability, sexual impotency, headaches, nausea, general anxiety, and changes in general mood.
6. Annoyance. A large number of factors govern how annoyed people will be by noise. First, there are characteristics of the noise itself, i.e. its loudness and duration, whether it is impulsive or steady, contains speech or music, or piercing "pure tones." Second, background noise levels help in determining how "intrusive" and thus annoying a particular noise is. Third, place, time of day and seasonal variations can make a difference; people are more likely to be disturbed at home, at night, and during warm weather. Finally, a person's actual total exposure to the noise source, and his or her attitude toward it may play a part.

The number of people disturbed by noise generally goes up as noise levels increase. Predicting annoyance response to noise in particular situations, however, is difficult. Individuals who complain are generally not unusually sensitive to noise. They do tend to have a higher socioeconomic status and a better education than those who do not complain,

but there are few other guidelines. Community-wide annoyance response also depends on leadership within that community and a sense of community. Complaints are not, then, very good criteria to apply in setting protective noise standards. As a result, criteria based on the harmful and disturbing effects of noise on persons have emerged as more objective, measurable, and protective approaches to the problem of setting noise standards.

Noise in the Escalon Area

Introduction. Before going into the objectives, guiding principals, and plan proposal for Escalon, it is well to have an understanding of noise in the Escalon area. Although the State requires that the noise element examine transportation noise with development of noise contours, other types of noise will also be reviewed.

A brief discussion on background noise will first be presented. Noise sources, high noise routes and facilities are next identified and mapped along with noise contour prediction methods. Noise-sensitive and noise-generating land uses are also mapped, since it is the juncture of such uses that potential noise conflicts exist.

Also used in the collection of data was a noise survey questionnaire, and a survey of background noise levels involving the taking of measurements. The inventory and findings were all taken from the adopted Noise Element of the San Joaquin County Council of Governments.

Background Noise. Background noise levels in residential neighborhoods in San Joaquin County were noted to usually be a function of traffic noise, except for isolated instances where industry or transformer noise sets a high steady background level. The outdoor noise levels in Escalon's neighborhood sections were found to be between 37-42 dBA during the daytime, and 33-43 dBA during the night. Almost all noise level measurements were taken during cool weather months. In summer months, air conditioning may raise ambient levels, and more people tend to be outside, also slightly raising background levels.

The "bothersomeness" of noise is typically related to background noise levels. A 42 decibel noise might pass unnoticed in an urban setting but stick out twice as loud in a rural setting. The California Advisory Committee on Noise found few noise complaints will occur when the intruding noise from specific point source is only 0-5 decibels above the background levels. When the difference rises 10-15 decibels, however, many complaints will usually occur.

In commercial areas, automobile traffic again usually sets the background levels. Since commercial areas are often on major roads and generate a great deal of traffic themselves, background levels tend to be higher during business hours.

Industrial ambients may be caused by traffic or from noise generated by the industries themselves. Industrial background noise levels in San Joaquin County ranged from 45-65 dBA at property lines.

Noise Sources. Superimposed upon the steady background levels are intermittent identifiable noise sources. Some of the typical sources of noise found in San Joaquin County are listed in Table 1. Typical noise levels are shown in Table 2. These tables are used to determine noise sources and levels in Escalon as there are no unusual circumstances to indicate that any other should be used.

The San Joaquin County Council of Governments ran a newspaper questionnaire in preparation of their Noise Element. Results of this questionnaire show for the Escalon area that motorcycles are the major sources of noise complaints. Remaining complaints were from automobiles, trucks and barking dogs. The survey did not direct itself to appliance and home equipment noise problems, but they are certainly a source of noise pollution in and around most homes.

Transportation noise is the major noise source in the County. Effects of transportation noise can be expected to be worse along high volume transportation routes and facilities. The "problem" and "critical" routes are shown on the Noise Element Map (page 20). Problem and critical routes are identified for the purpose of preparing the COG's development policies, but serve no purpose for Escalon's element and will be treated the same. Problem noise roads are those with 100-300 trucks per day or 5,000-10,000 vehicles per day. Critical routes are those with more than 300 trucks or 10,000 motor vehicles per day on an annual average, or more than 10 operations per day on a rail line.

Figures 1 and 2 may be used to predict the noise contour for the high volume transportation routes. Escalon lies on a relatively flat terrain and all transportation routes are at grade. In a few isolated incidents there may be a minor reduction for shielding by buildings, however, for the purposes of this element of the general plan, the two figures may be used. The predicted noise level is calculated from the figures by measuring the distance from the nearest point of the noise source to the point of exposure.

Ground rapid transient facilities do not exist in the Escalon area and such facilities are not planned in the foreseeable future. No further mention of this possible noise source will be made in this element.

Contours developed by the San Joaquin County Council of Governments show that the Escalon area is not affected by airport operations or aircraft. This will not be further discussed in this element.

Noise Element Map. The noise element map contains the "problem" and "critical" transportation routes and facilities, land use sensitive from a noise impact standpoint, and noise generating land uses. Where sensitive land uses are located near major transportation routes and facilities, or commercial or industrial areas, disturbance from noise is likely. Chart 2 is provided as a reference.

Table 1
TYPICAL SOURCES OF NOISE
WHICH CAN BE FOUND IN SAN JOAQUIN COUNTY

A. Transportation

1) Trucks

- a. Exhaust noise
- b. Engines
- c. Transmission and differential noise
- d. Chain drive noise
- e. Chassis noise
- f. Brakes
- g. Air compressors
- h. Sheet metal parts
- i. Tire whine

2) Automobiles

- a. High speed tire squeal
- b. Tire tread noise
- c. Rattles
- d. Engine noise
- e. Exhaust, particularly if the muffler is modified
- f. Horns

3) Motorcycles

- a. Exhaust
- b. Intake
- c. Engine
- d. Tires

4) Rail

- a. Train track noise
- b. Breaking
- c. Squeak of wheels on curves
- d. Whistles
- e. Air brakes

5) Aircraft

- a. Piston engines
- b. Jet Aircraft noise
- c. Helicopter blade noise

B. Industrial Noise

1) Out-of-doors processing

- a. Air intake
- b. Discharge ducts
- c. Compressors
- d. Engine intakes and exhausts

- e. Pump and engine radiation
- f. Steam discharge

2) Enclosed Industrial Plant

- a. All of above
 - (1) With open windows
- b. Fans and blowers
- c. Punch presser
- d. Machine tools
- e. Forging equipment
- f. Printing presses

3) Out-of-doors operations

- a. Warehousing of steel and lumber
- b. Scrap yards
- c. Truck and rail freight handling
 - (1) hydraulic lifts
- d. Transportation and loading
 - (1) freight cars
 - (2) local yard movements

4) Plant auto traffic

- a. Shift employees
 - (1) leaving and arriving at early or late hours

C. Construction Noise

1) Diesel engines

- a. Generators
- b. Compressors
- c. Trucks
- d. Shovels
- e. Bulldozers
- f. Frontloaders
- g. Scrapers
- h. Power shovels
- i. Rock drills

2) Electric Motors

- a. Whining and groaning sounds

3) Air Compressors

- a. Intake and discharge

4) Blasting

5) Pile driving

- a. Engine
- b. Hammer driven caissons

6) Riveting

- a. Hammer
- b. Electric or pneumatic nut-setter

7) Materials handling equipment

- a. Demolition
- b. Scrap material handling
- c. Elevators
- d. Cement mixers

8) Special equipment

- a. Generators
- b. Rock drills

9) Interior finishing

- a. Residential construction
- b. Hammers
- c. Power saws
- d. Electric drills

D. Heating, Ventilating and Air-Conditioning

1) Air Conditioning

- a. Cooling tower
 - (1) Fans
 - (2) Water spray
- b. Window units
 - (1) Compressor
 - (2) Fan
 - (3) Rattles
- c. Intakes and discharges
- d. Draft fans
- e. Oil burners
- f. Combustion
- g. Pumps
- h. Attic ventilating fans

E. Environmental Noise

1) Leisure activities

- a. Radios
- b. Stereos
- c. T.V.
- d. Musical instruments
- e. Workshop and home improvement tools

- 2) Outdoor activities
 - a. Power mowers
 - b. Hedge trimmers
 - c. Chain saws
 - d. Auto, motorcycle, and motorboat repairs
 - (1) Engine run-up
- 3) Home appliances
- 4) Talking
 - a. On street
 - b. Arguments
 - c. Parties
- 5) Vehicles
 - a. Ice cream trucks
 - b. Delivery trucks
 - c. Ambulances
 - d. Fire vehicles
 - e. Police vehicles
 - f. Motorcycles
 - g. Motorboats
- 6) Refuse collection
 - a. Trash cans
 - b. Engine exhaust
 - c. Loaders and compactors
- 7) Meeting noises
 - a. Street meetings
 - b. Religious meetings
 - c. Concerts
 - d. Church bells
- 8) Children at play
 - a. School yard
 - b. Playground
 - c. Street
 - d. Yards
- 9) Animals
 - a. Barking dogs
- 10) Sound trucks

Table 2

TYPICAL NOISE LEVELS FROM VARIOUS SOURCES IN dBA

<u>Transportation & Recreational Vehicles</u>	<u>dBA Level</u>
Passenger cars (50')	64-76
Sports Cars (50')	70-80
Light trucks (50')	70-85
Medium-heavy trucks (50')	75-95
Motorcycles-street (50')	65-95
Off Road Motorcycles (50')	80-105
Buses (50')	70-87
General aviation propeller aircraft (take-off @ 1000')	76-93
2-3 engine jet aircraft (take-off @ 1000')	90-100
4 engine jet aircraft (take-off @ 1000')	100-105
Light helicopter (55')	65-78
Medium - Heavy helicopters (500')	76-92
Diesel locomotive (50')	88-98
Freight cars (50')	80-94
Train horn (50')	90-114
<u>Industrial Machinery, Equipment (User Distance)</u>	
Pneumatic Power Tools (Grinders, Chippers)	90-116
Molding machines	102-106
Air blown devices (for paint, clean, etc.)	90-105
Blowers (forced, fan, induced, etc.)	80-100
Air compressors	92-100
Metal forming (Punch, Shearing)	82-97
Combustion (Furnaces, flare stacks @25')	82-97
Turbo generators (Steam @10')	88-92
Pumps (Water, hydraulic)	80-92
Transformers	83-84
<u>Industrial</u>	
Tractors (50')	75-95
Graders (50')	80-95
Pavers (50')	85-87
Concrete Mixers (50')	75-88
Movable Cranes (50')	75-88
Generators (50')	72-82
Jack Hammers & Rock drills (50')	80-98
Impact Pile drivers (peaks) (50')	95-105
Vibrator (50')	69-81
Saws (50')	72-82

Home Appliances

Level of
Operator
Exposure (dBA)

Group I: Quiet Major Equipment and Appliances

Refrigerator	40
Freezer	41
Electric Heater	44
Humidifier	50
Floor Fan	51
Dehumidifier	52
Window Fan	54
Clothes Dryer	55
Air Conditioner	55

Group II: Quiet Equipment and Small Appliances

Hair Clipper	60
Clothes Washer	60
Stove Hood Exhaust Fan	61
Electric Toothbrush	62
Water Closet	62
Dishwasher	64
Electric Can Opener	64
Food Mixer	65
Hair Dryer	66
Faucet	66
Vacuum Cleaner	67
Electric Knife	68

Group III: Noisy Small Appliances

Electric Knife Sharpener	70
Sewing Machine	70
Oral Lavage	72
Food Blender	73
Electric Shaver	75
Electric Lawn Mower	75
Food Disposal (Grinder)	76

Group IV: Noisy Electric Tools

Electric Edger and Trimmer	81
Hedge Clippers	84
Home Shop Tools	85

TYPICAL PEAK VEHICLE NOISE LEVELS VERSUS DISTANCE FROM MAJOR ROADS

MICROPHONE 5 FEET ABOVE GROUND

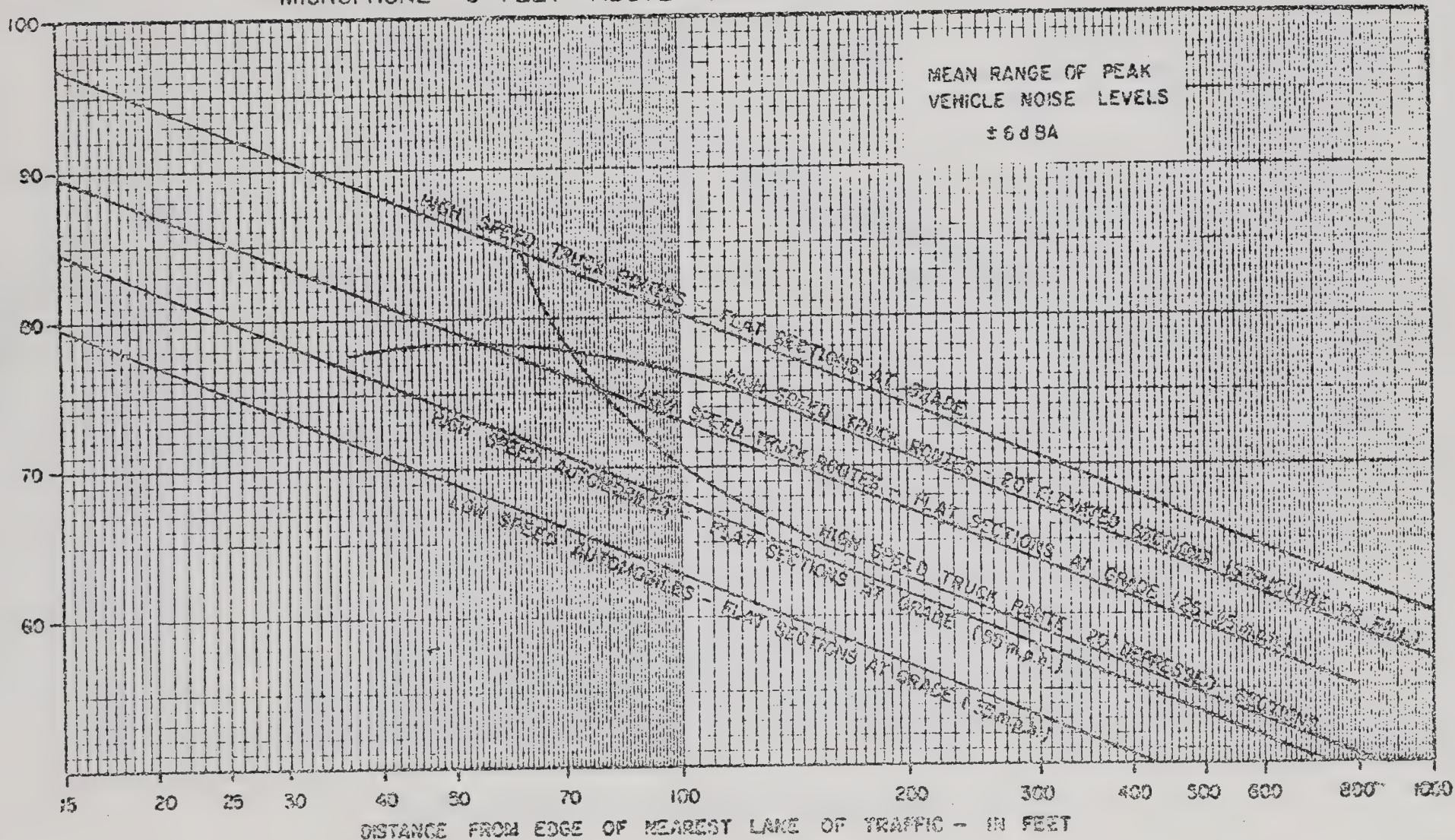
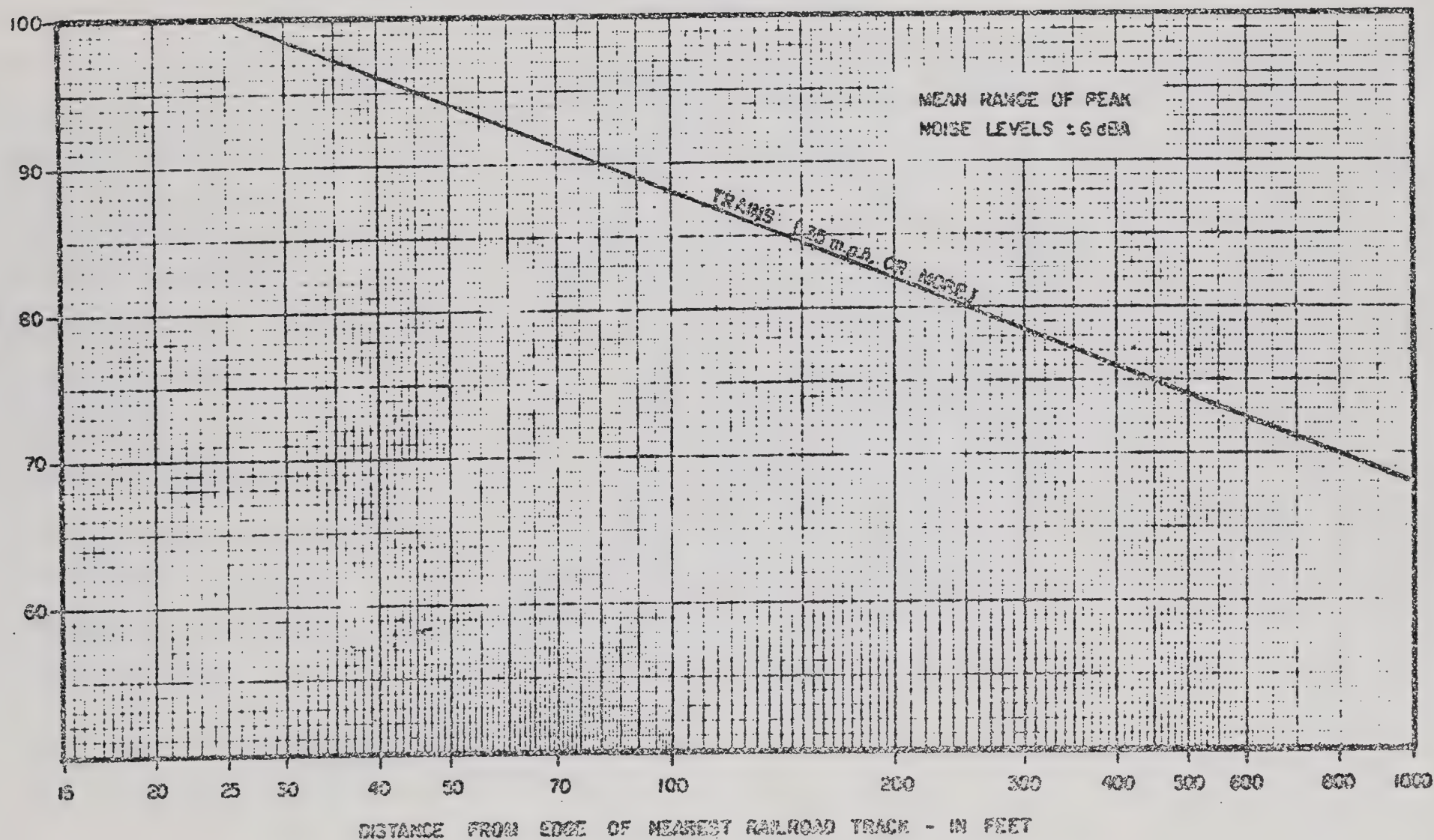


Figure 1

TYPICAL PEAK NOISE LEVELS VERSUS DISTANCE
FROM MAJOR RAILROADS

MICROPHONE 5 FEET ABOVE GROUND

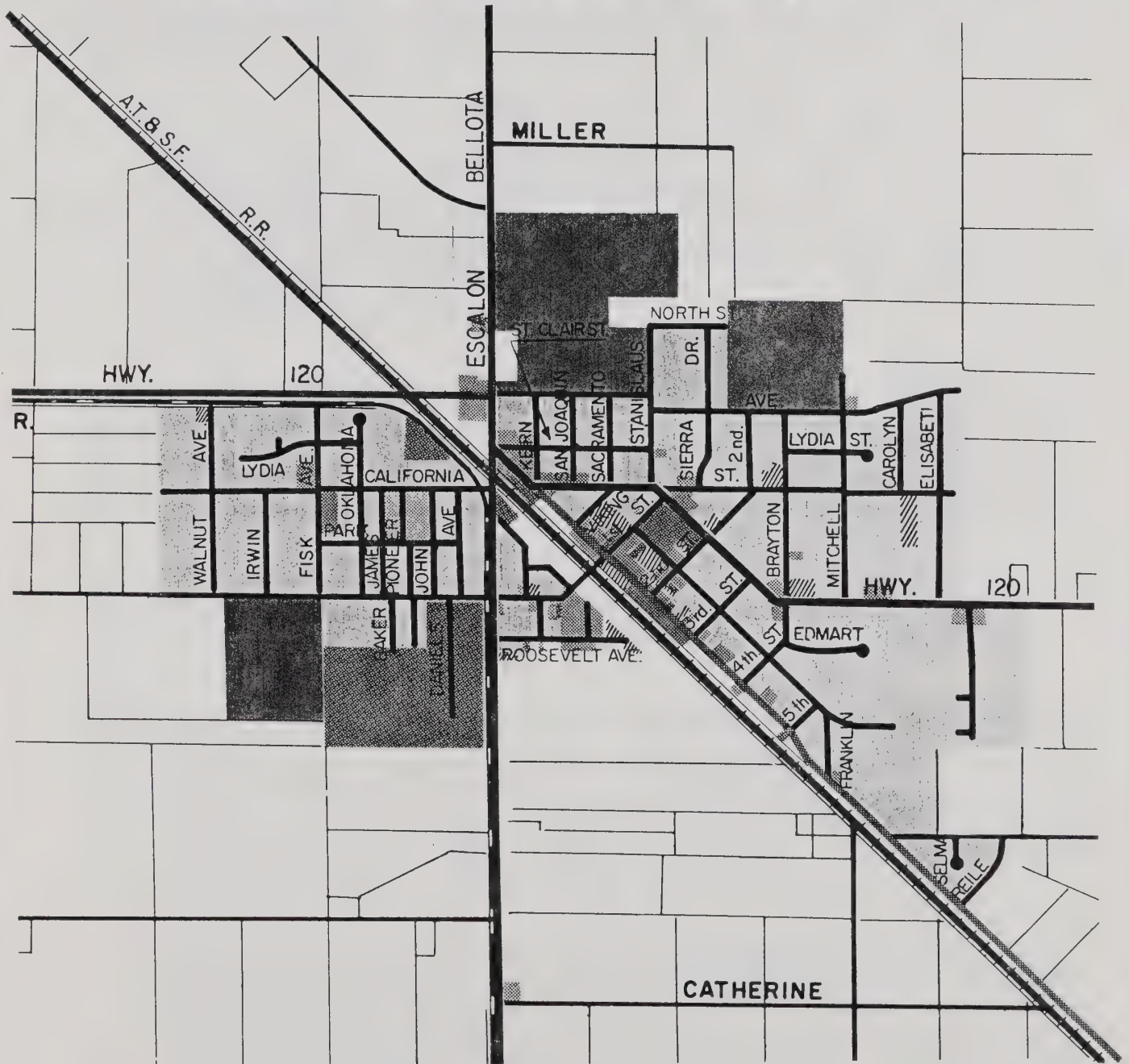


LAND USE COMPATIBILITY CHART

	Quiet Rec.	Hosp.	Sch.	Res.	Other Rec.	Ag.	Bus./ Comm.	Ind.	Roads	Air- ports	R.R.
Quiet Recreation or Wildlife areas	1	3	3	3	2	2	3	3	3	3	3
Hospitals, Convalescent Hospi- tals, Rest Homes	3	1	2	1	2	2	3	3	3	3	3
Schools, Libraries	3	2	1	1	1	1	2	3	3	3	3
Residential	3	1	1	1	1	2	2	3	3	3	3
Other Recreation	2	2	1	1	1	1	2	3	3	3	3
Open Space/ Agriculture	2	2	1	2	1	1	1	1	1	1	1
Business/Commercial	3	3	2	2	2	1	1	2	1	2	2
Industry	3	3	3	3	3	1	2	1	1	1	1
Major Roads	3	3	3	3	3	1	1	1	1	1	1
Airports	3	3	3	3	3	1	2	1	1	1	1
Major Railroads	3	3	3	3	3	1	2	1	1	1	1

- 1 - Generally Acceptable
- 2 - Sometimes Acceptable
- 3 - Not Usually Acceptable

ESCALON NOISE ELEMENT MAP



- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- SCHOOLS / LIBRARIES
- CRITICAL NOISE RTES.
- PROBLEM NOISE RTES.

- HOSPITALS / CONVAL. & REST HOMES
- PARKS
- OTHER NON-RESIDENTIAL STRUCTURES

B. Methods for Noise Reduction

Introduction. Society has allowed noise to become an environmental problem and has made only sporadic attempts to control it. The problems of noise generation and past acceptance can be related to economics, priority settings, attitudes, ignorance of the environmental health effects, and man's ability to adapt to certain environmental predicaments to a certain degree. With an understanding of sound and its effects on humans, and knowing the sources of noise, certain changes can be made to reduce the amount of unwanted sound that reaches the ear.

There are several methods of noise control. They include:

- quieting the noise source itself
- substituting noisy operations with quieter operations
- buffering or enclosing the source
- controlling the operation or location of noisy sources
- absorbing reflected sound
- masking the noise
- insulating the receiver.

In most instances, the key to quiet is in the planning, layout, and design of a building, of a subdivision, or of a city. Once construction has occurred, it is usually much more expensive and difficult to achieve satisfactory results. Excellent results can be achieved, often at little to no added expense if noise considerations are taken into account at the beginning.

The remaining portion of this section deals with outline methods of alleviating existing bothersome noise situations, and methods of designing to prevent problem noise situations from occurring in the future. Further details on the methods may be found in the COG Noise Element.

Road Noise Abatement Techniques, Procedures & Other Alternatives

1. Vehicle Noise Reduction: It is abundantly clear, from the COG noise survey and results of other published surveys that the din of motor vehicle traffic is more annoying to people than almost all other noises put together. If city living is to be made tolerably quiet, primary efforts must be directed to reducing the noise of motor traffic.

California motor vehicle noise laws have established step-down maximum noise levels which manufacturers must meet to sell all types of vehicles in the State. These have provided an impetus to manufacturers to reduce noise levels of motor vehicles, and much research is being directed toward better muffling of exhaust, quieter tire designs, and quieter and better enclosures around engines. The Federal Government will be preempting states from setting such noise limits governing the sale of products. However, they are adopting standards identical to present California requirements regarding truck noise levels. No standards for other motor vehicles have as yet been proposed. (California regulations remain in effect until federal standards are adopted.)

Truck: Noise emitted by a truck has several principal components: exhaust, engine, gears, fan and air intake. In addition, at higher speeds, tire and wind noise add to the problem. Thus, reducing truck noise is a complicated problem.

With present technology, most existing trucks can be quieted to 86 dBA @ 50'. Truck manufacturers state there are technical obstacles and there may be as much as a 15% increase in costs to reduce noise levels significantly lower.

Whatever levels are achieved, maintenance must play a large part in maintaining lower truck noise levels. The average diesel truck will probably run over 500,000 miles in its lifetime. Over this time period, many of the components will be replaced either due to wear or to modification for individual operator needs. Consequently, the noise output of many heavy trucks may increase significantly from their original condition, particularly if muffler and tire replacements do not provide noise performance equal to that of the original equipment. For example, the difference between a faulty or no muffler and a truck muffler in good condition is approximately 15 dBA.

Tire replacement is also important. Tires fall into three clearly defined categories as noise producers: pocket retread, cross-bar, and rib. Loudest are the pocket retread. The quietest tires are rib designs. Loudness produced by most tires increases when the tire is half used. The difference between rib and pocket retreads may be nearly 20 decibels: 4 times as loud.

Operation of the truck also makes a difference in noise levels. On a level roadway, acceleration produces 5 dBA more than steady running conditions.

Automobile: Exterior levels of passenger cars show that the noise of the newest vehicles (manufactured since 1969) is 2 to 3 decibels less than that of older vehicles. According to testimony given at the Senate Noise Hearings, the majority of passenger cars built in the United States since 1969 meet present California noise requirements.

As with trucks, tire types make a great deal of difference in automotive noise levels particularly at high speeds. All known comprehensive studies of auto traffic noise show that tire noise becomes a dominant source at high speed. Rib tires are quietest.

Bus: Significant noise reduction is still in the research stage. However, test results from one feasibility study showed a 9 to 10 decibel reduction at 3 feet from a modified bus, and a 6 decibel reduction in levels at 50 feet. Further, the sound of the bus became deeper in tone and less harsh. These results indicate promising reductions can be achieved if muffler and resonator space limitations can be overcome.

Motorcycle: With motorcycles there is unfortunately often a real tradeoff between power and quiet. This is not so with cars where there are no space problems or weight limits. Mufflers on motorcycles particularly off-road cycles definitely cut power. Thus, most motorcycle owners modify the mufflers.

Research is underway to develop demonstration mufflers and new ways to design muffling systems so that motorcycles can be powerful and quiet. At UC Davis, research is concentrating on 2-stroke motorcycles. They are designing exhaust systems which will be just as powerful as unmuffled exhaust systems are presently.

In State tests motorcycles with modified mufflers gave readings 5 to 8 dBA higher than comparable percentages of motorcycles with apparently stock mufflers. Over 75% of the motorcycles in speed zones of 35 mph or less and 25% of those on freeways were observed to have modified exhaust systems. Of those in violation of present limits, the percentages with modified systems were 79% and 81%. More effective mufflers will undoubtedly help alleviate this situation.

2. Location and Design of Major Roads. Ideally, major roads should be separated from sensitive uses by open space, or industry or commerce, assuming these latter two uses do not impact sensitive uses. In route selection noise impacts should be carefully weighed against other costs and benefits, and noise sensitive areas avoided where possible. Evaluation factors for rating route selection and design should include:

- peak levels (distance of homes to traffic lanes and speed of traffic)
- numbers of dwelling units affected
- schools, hospitals, convalescent homes, other sensitive land uses affected
- traffic volume, and weighted more heavily, truck volume
- stoplights, curves, grades making shifts of gears necessary
- road condition
- distribution of traffic over time

Acquiring wider right-of-ways are a possibility for lessening noise impacts. However, the additional land needed is great to achieve acceptable noise levels. Thus, once route location is selected, minimizing noise impacts through road design becomes very important.

Barrier: The primary method for significantly reducing noise from major roads is to put up barriers. Good barriers may reduce noise 10 to 15 decibels, which means sounds would sound half or one third as loud as before the barriers went up. Any barrier shielding is limited to a 15 dBA reduction because of leakage over the top and environmental factors.

To be effective a barrier must:

- 1) Be high enough and long enough to block vehicles from view: what can be seen can be heard.
- 2) Have reasonable mass
- 3) Not leak sound through cracks or holes.

Barriers may be constructed of concrete blocks and slabs, bricks, thick 1/2" plywood panels or earth. All will provide about equal amounts of reduction since the leakage over the top of the barrier determines the net result. Solid concrete block or slabs have superior durability. Earth mounds covered with plantings are probably the most pleasing type of barrier and are particularly effective because they can both absorb and block sound. Combinations such as concrete barriers atop earth berms may also be used.

In 1971, the State Department of Public Works estimated 11 foot high barriers would cost between \$40 and \$50 per lineal foot. Costs for six foot high noise barriers started at \$5 per linear foot for wood fences, and \$10 for plain concrete, masonry, or stucco walls. Special esthetic treatments or additional height automatically raises both initial cost and accident repair costs. Often the most economical barrier is a greenery covered earth berm, if space permits.

A 1972 EPA report estimated noise barriers may cost from \$50,000 to well over \$100,000 per mile depending on type of construction and whether or not they were included in the original highway design. However, barriers are often cheaper or better than other alternatives such as buying very wide easements or right-of-ways, zoning strip commercial or industrial, insulating individual homes, etc.

Buildings: Buildings can also act as sound barriers. A solid row of commercial buildings may provide up to 15 decibels reduction. A typical reduction of about 5 dB per row of houses can be used depending on how closely spaced the buildings are.

Sound penetration studies indicate that shielding from structures is effective only for the first two or three rows of houses and remains constant thereafter. The maximum reduction from houses should not exceed a maximum of 10 dB and should only be applied where no direct line-of-sight exists.

Where there are only scattered buildings, each individual building might produce a small localized barrier effect, but the combined effect of sparsely located buildings is negligible. It is understood that the average height of any barrier row of buildings must equal or exceed the average height the second or third row of buildings for a noise reduction to be realized.

Plantings: Plantings will not reduce noise levels significantly although they may provide a psychological feeling of isolation. At most, noise levels might be reduced 1 decibel per four feet of dense plantings. Another report suggests a 5 dB reduction per 100 feet of dense trees not to exceed 10 dB. This is because plantings possess none of the physical properties that are required of a good sound shield. They are pourous to air and sound, vibrate easily and lack density. As wind can pass through them, so can sound.

Engineering Designs: Engineering controls, such as depressing or elevating highways can also reduce noise impacts. Roadways elevated 20 feet on structures or with narrow shoulders will reduce noise levels 3 to 8 decibels below noise levels of at-grade roadways in areas less than 100 feet from the nearest lane of traffic, and about 3 decibels thereafter.

Elevated freeways with wide (36' or more) shoulders will reduce levels 7 to 12 decibels below those at ground level, and 7 decibels thereafter. Thus the highest peak levels will be reduced. However, noise from elevated freeways will be harder to block so that undesirable high peak levels are likely to affect a large area.

Depressed roadways can make a very significant difference in noise levels. Once shielding from sight of vehicles becomes effective (at about 100 feet from the nearest lane of traffic) noise levels will be about 12 decibels less than levels from at-grade roads.

Combining barriers with the above designs can make a dramatic contribution to further noise reduction.

3. Road Surfaces, Gradients, Vehicle Speeds, Stoplights & Curves: Road surfaces can make a possible 7 decibel difference in average noise levels from automobiles. According to "Fundamentals and Abatement of Highway Traffic Noise" the difference is as follows.

<u>Surface Description</u>	<u>Add to Auto Noise Level</u>
Very rough surface	+5 dBA
Rough surface	+2 dBA
Average surface	0
Medium smooth surface	-2 dBA
(Very smooth surfaces could reduce noise levels to a -5 dBA, but they would probably be too slippery to be safe.)	

Not only road surface, but road condition adds to noise. If a road is rutted and bumpy, irritating clanks and rattles from all vehicles will stand out. Keeping roads in good repair will reduce the bothersomeness of vehicular noise.

Road gradients will make a difference in noise levels of trucks with an increase of up to 5 decibels for a gradient of 7% or more.

Lower vehicle speeds reduce noise levels. Most vehicles increase $2\frac{1}{2}$ to 3 decibels per increase of 10 mph. Keeping speed limits down thus can have a beneficial effect in some marginal situations and should not be ignored.

Timing stoplights and straightening very sharp curves will reduce shift changes and braking, thus vehicles will pass more smoothly and quickly by.

4. Policing and Route Restrictions: Other possibilities for traffic noise abatement are greater policing efforts for muffler noise enforcement, and for control of speeding and reckless driving.

Truck routes are another way for cities to control vehicular noise. In most cases this means trucks are limited to certain routes; however, cities can also limit truck access to certain times of the day.

5. Zoning and Building Restrictions: Zoning land adjacent to major roads for non-residential use is a good alternative for reducing road noise impacts. Where this is not feasible, local governments can place building restrictions on development of sensitive land uses in noise impacted areas. Insulation of homes adjacent major roads is briefly discussed in the following "Building and Design Techniques" portion. Estimated distance-barrier-insulation combinations which would provide acceptable living environments are also presented.

Railroad Noise Abatement Techniques. Methods for reducing train noise have not received attention until very recently, and are limited in effectiveness and few in number. Only a small number of vehicles in operation today have been affected even by existing programs.

1. Vehicle Noise Reduction: Most diesel electric locomotive exhaust systems have no mufflers. Since this is a major cause of noise, it is possible that mufflers could be designed to reduce overall sound levels. In addition, more substantial casing around the diesel engine together with acoustically absorbent material, may be effective in reducing noise from this source.

Lubricating wheels will reduce wheel/rail noise slightly, as will use of steel wheels with a constrained damping layer.

2. Track Noise Reduction: Grinding tracks to eliminate surface irregularities may lower noise levels. Welding tracks will yield a 3 to 6 decibel improvement in average levels over bolted rails.
3. Route Design: As with roadways, barriers can significantly reduce noise levels from trains, particularly if they are installed close to the track. Many train tracks are slightly elevated and this must be taken into account in shielding with barrier. However, since most noise (other than engine noise) comes from wheel/rail interaction, barriers which only partially shield the train may achieve significant reductions. The EPA estimates a 10-15 dBA reduction could be achieved with a 4 foot barrier alongside the track.

4. Land Use Planning: Land use planning has an important role in railroad related noise control. Unlike roadways, there is presently no need for access of residential areas to railroads. Thus, land separation from sensitive uses can be utilized without diminishing its transportation function. This is the most effective tool local governments can utilize to control railroad related noise. Switchyard areas in particular should be separated and buffered from residential land use.
5. Railroad Operations: Local governments are largely preempted from regulating railroad operations to reduce noise: for example, by placing limits on speed or curfews on operations. The state and federal Public Utilities Commissions contend they have final authority over all phases of railroad operations. Thus planning for compatible land use, and utilizing building restrictions on nearby developing sensitive land uses are the more important local government tools

Recreational Noise Abatement. Maintenance of recreational vehicles in good operating condition is necessary for keeping noise levels down.

1. Vehicle Operations and Policing: Motorcycles are covered by state noise laws. Police may cite operators for modified mufflers or inadequate muffling and for exceeding maximum vehicle noise limits. Active enforcement of such laws will help bring noise levels of the worst offenders in line. It should be noted, however, that like other vehicles noise limits, the levels allowable are high and will not help residents who live in close proximity to heavy motorcycle use areas.

Curfews on use of recreational vehicles are another possibility, however, this is not necessarily practical nor desirable.

2. Establishment of Special Use Areas: Two types of recreational areas need to be provided for and buffered from other uses:

One is the quiet use area where motorized vehicles and other high noise producing sources are restricted or prohibited. These could include separated bicycle paths and "natural use" park areas where access is limited to motor vehicles and perhaps earth berms, other barriers or distance provide a buffer from noisier areas.

The other is the noisy recreational area for motorcycles, skeet shooting, etc., where people can engage in noise activities without disturbing other persons. Such uses would have to be designed, buffered, and located so that noise impacts on other uses are minimal. Abandoned gravel pits, for example, could be used for motorcycle parks.

Noise Control in & From Industrial & Commercial Uses

1. Designing for Site Noise Control: Designing for quiet is almost as important for industrial and commercial uses as it is for residential uses. In building or remodeling, many decisions can be made which will affect interior and exterior plant or office noise levels. Lowering interior noise levels alone may have the added benefit of reducing exterior noise emissions.

Isolating and enclosing noisy sources, buying quiet machines and equipment when possible, using sound absorptive material such as drapes, acoustic tiles, carpets, etc., to reduce reverberation of sound are all methods which will reduce noise in the design stage.

Engineering Control Methods: Following are several general methods for controlling primarily in-plant industrial noise levels. Specific methods to use in the plant can be determined by detailed engineering methods. Some methods will apply to offices and commercial uses also.

- Maintenance
- Substitution of machines
- Substitution of processes
- Vibration dampening
- Reducing sound transmission through solids
- Reducing sound produced by fluid flow
- Isolating noise sources
- Isolating operator
- Equipment location and environment

Building Insulation and Barriers: As with other noise sources, insulation of the building and barriers can be utilized to alleviate noise impacts from commercial and industrial uses where they will affect sensitive uses. Barriers can be put up to buffer noise levels. Careful construction, orientation and insulation of new buildings will help reduce the transmission (or reception) of "problem" noise levels.

Excess Land Acquisition: Excess land can be used as a buffer so that noise created by an industry or commercial activity does not impact other land uses.

Location of Access Routes: In the design of industrial and commercial areas, heavy traffic or truck routes should be located so that access to the area does not pass through sensitive land uses. This is an important consideration in the location and design of any use generating significant amounts of traffic, particularly truck traffic. In existing situations where more than one access route is available, elimination of the access which passes through a sensitive use area is a possibility.

Buy Quiet: Noise specifications should be requested when buying any new equipment so that comparative purchases can be made.

Specifications should: 1) Describe what level is desired in a particular situation, remembering that two or three pieces of the same equipment spaced closely together will yield higher overall sound levels (doubling the source will increase sound levels by 3 dB); 2) Request that manufacturers specify what level they can meet if they cannot meet the desired level; 3) Specify how the equipment should be measured (in dBA...) or various other measurement scales may be used; 4) Specify the distance of 3 feet and perhaps at greater distances to determine effects on the larger work situation or community.

2. Land Use Planning & Performance Standards: Land use planning for compatible land uses is important around industrial and commercial use areas. Residences need to be protected from noise impacts from commercial and industrial activities, as industrial and commercial uses need to be protected from possible restrictions on activities from citizen actions.

On the peripheries of industrial or commercial use areas, performance standards specifying how much noise may be emitted into sensitive use areas can be employed for new business and industry. At the maximum, no performance standards should allow noise levels which exceed reasonable noise ordinance limits so that problem situations are not created. Since noise ordinances were developed to mitigate existing noise problems in a reasonable manner, performance standards may strive to create even lesser noise impacts on a surrounding area. For example, decibel and time limits can be spelled out.

3. Site Operations: Curfews are used as a method of alleviating community noise problems when people are most apt to be disturbed in the evening and at night. They are the primary method for controlling construction noise.
4. Other Control Methods for Construction Activities: Some cities have put decibel limits on the amount of noise a construction site may generate. Measures which can be utilized to control construction site noise include:

- Operate only certain equipment at one time
- Move some of the noisiest equipment items further into the construction site
- Use temporary walls or complete enclosures around certain equipment
- Modify the equipment to make less noise through muffling or other methods mentioned earlier
- Buy quieter replacement equipment, or substitute quieter processes when possible

5. Noise Ordinances: Local governments can regulate business and industrial noise emissions through noise ordinances. This tool helps alleviate existing noise conflicts between uses. In most instances, ordinances set maximum decibel and time limits to noises emitted at the property line from a business or industry.

6. Personal Ear Protection: Ear plugs or muffs will reduce noise levels reaching the inner ear 20-30 decibels or more. In a situation where noise is harmful, or distracting, ear protection can be helpful. It is a poor substitute for a quieter environment and should only be necessary when other methods are unavailable or unfeasible. There is some risk that a person may not hear important warnings with earplugs in, particularly if a person already has hearing loss. But minimizing hearing loss and distraction are certainly compensating benefits.

Building and Design Techniques for Sound Reduction. This section suggests building design and construction methods to reduce noise levels in structures.

1. Placing and Orientation of Buildings: The sensitive building should be located as far away from a noisy source as possible. Noise producers should be buffered from sensitive uses. Sensitive buildings should be shielded with a solid barrier which completely blocks the noise-producing source from sight. Holes or cracks in the barrier, or any openings such as streets, sideyards, etc., will allow sound to pass through. Complete shielding allows homes to be built much closer to major roads and railroads without adverse noise impacts.

The layout of a building itself may also be oriented so that noise impacts are minimized. For example, in a residence, bedrooms should be located away from the noise source so that other parts of the building can serve as a barrier. Garages can be located at the front to shield parts of the dwelling. Some newer commercial buildings along major arterials are locating doors at the back, away from noise sources to minimize business disruptions when doors are opened.

2. Building Construction Techniques: Other than buffering through distance or barriers, building construction and design, and sound insulation are the major factors making interior environments acceptable or not near major noise sources.

With proper construction techniques, the full reduction potential of a sensitive use structure can be realized. This corresponds to approximately 20 decibels for an ordinary wood frame construction and 25 decibels for masonry buildings, according to the U.S. Department of Transportation:

<u>Building Type</u>	<u>Window Condition</u>	Noise Reduction Due to Exterior of the Structure
All	Open	10 dB
Light Frame	Ordinary Sash Closed	20
	With Storm Windows	25
Masonry	Single Glazed	25
Masonry	Double Glazed	35

With additional sound insulation, residences could have acceptable interior living environments where exterior noise levels are high. Such additional sound insulation is more economically feasible, according to a sound insulation firm, in multi-family rather than single family homes. If demands for housing and a lack of suitable land for development make it necessary to build in noise impacted areas, proper insulation can insure that at least interior living environments are acceptable.

Sound insulation may be needed not only for reduction of noise from exterior sources, but between units of multi-unit dwellings. Too often, sound insulation is not provided between dwelling units (or office spaces) causing annoyance, disruption of activities such as speech or sleep interference, and a loss of privacy. It is not possible to achieve accurate control of sound transmission by simply specifying construction requirements for walls and floors. This is because noise can travel from one room to another along continuous walls, through cracks, ventilation ducts, electric boxes, pipes, conduits or medicine cabinets no matter how good the wall. Thus, the Uniform Building Code, State housing insulation standards and COG policies focus on specifying limits for the amount of noise that may be transmitted or received in units leaving it to builders to devise means of complying with these limits.

III

STATEMENT OF DEVELOPMENT POLICIES

A. Noise Objective

It is the objective of the City of Escalon to minimize the harmful or disturbing effects of noise on people in future land use decisions and building designs and where possible, to alleviate present noise problems.

B. Guiding Principals

1. Minimize existing noise problems along the critical and problem noise routes, and the juncture of noise-sensitive and noise-generating land uses.
2. Where new residential development or other sensitive land uses are proposed near existing commercial, industrial, or transportation route areas, residential structures should be designed to limit peak levels from such establishments to maximum acceptable levels.
3. Where new commercial, industrial or transportation uses are proposed near existing or proposed residential or sensitive land use areas, the proposed commercial, industrial or transportation use should be designed to limit peak levels from such establishment to maximum acceptable levels.
4. Recreational open space used primarily for quiet activities such as hiking, camping, fishing, swimming, etc., should be protected from man-made increases in noise levels.
5. Designated recreational areas should be provided for those wishing to engage in noisy pursuits such as off-street motorcycle and trailbike riding, rifle ranges, automobile racing, etc.

C. Standards

Chart 3 is the recommended desirable continuous level and maximum peak noise levels for residential and other sensitive land uses. These levels are recommended to protect the privacy of people, and to protect against speech, sleep or activities interference.

D. Plan Proposal

General. The plan proposal is the implementation of programs to achieve the noise objective. These are actions to be taken by the City Council, the Planning Commission and the City staff.

Studies, Reports and Reviews

1. Determine which junctures of noise-sensitive and noise-generating land uses and critical and problem noise routes have noise levels above the recommended standard. Develop possible priority program to alleviate the problems.

Chart 3
STANDARDS
EXTERIOR AND INTERIOR NOISE LEVELS

Exterior: Desirable Background Noise Levels (dBA)

	<u>Day</u>	<u>Night</u>
Rural Residential	35-45	25-35
Suburban Residential	40-50	30-40
Quiet Recreational	30-35	
Commercial	55-65	45-55
Industrial	60-70	50-60
Hospitals, Convalescent Homes, Rest Homes, Housing for the elderly	35-40	25-30
Schools, Libraries	40-45	

Interior: Desired Levels (dBA)

Maximum Peak Levels

Residential	25-40 (living) 20-35 (sleeping)	55 (living) 40 (sleeping)
Commercial,	50 (most areas)	60 (most areas)
Business	35 (quiet work areas)	45 (quiet work areas)
Industrial	less than 70	OSHA 8 hour standard with ear protection
Hospitals..	25-40 (living) 20-30 (sleeping)	50 (living) 35 (sleeping)
Schools, Libraries	35-40	45 ..

2. Consider possible noise impacts during the planning and design stages of land use proposals, both public and private.
3. Review possible amendment adoption of building codes to insure adequate sound insulation between dwelling units of apartments, and where appropriate, to insure adequate sound insulation of interior areas of both apartments and single family residences from especially loud external noise sources.
4. Consider the possible development of "quite zones" in special areas of the city, such as in existing recreational areas, so that people could visit and enjoy solictude as part of their recreation and leisure experience.

Ordinances and Enforcement

1. Consider the adoption of a reasonable comprehensive noise ordinance to deal with existing noise conflicts.
2. Review for immediate adoption a reasonable ordinance to deal with the barking dog nuisance.
3. Continue enforcement of the motor vehicle code as it applies to excessive noise.

Providing Information to the Public. Conduct an educational campaign consisting of civic group presentations, news releases, studies and reports to inform citizens of the dangers of noise and the actions each person can take to help reduce noise pollution.

Coordinantion With Other Public Agencies

1. Participate in studies to determine location of various quiet and noisy types of recreational activities.
2. Participate in review of county and regional comprehensive plans to identify noise enviornmental impact and develop alternatives for the control of major noise sources.
3. Contact state and federal officials to convey concern over noise problems and encourage residents to do the same.

City Operations. Take into consideration noise levels when purchasing new equipment, building or remodeling municipal buildings, awarding garbage pickup franchises, and employee safety in noisy areas.

Adopted by Resolution No. 74-2 of the Escalon City Planning Commission this 9th day of December 1974.

ATTEST:

/s/ Effie R. Latta
Effie R. Latta
Chairman

/s/ Earl Wilson
Earl Wilson
Secretary

Adopted by Resolution No. 376 of the Escalon City Council this 6th day of January, 1975.

ATTEST:

/s/ Carl J. M. Vilen
Carl J. M. Vilen
Mayor

/s/ Earl Wilson
Earl Wilson
City Clerk

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1. General Plan Guidelines. California Council on Intergovernmental Relations, Sept. 20, 1973
2. Quiet City Report. League of California Cities
3. Noise Element. San Joaquin County Council of Governments, July 23, 1974

A RESOLUTION OF THE ESCALON CITY PLANNING
COMMISSION RECOMMENDING APPROVAL OF THE
NOISE ELEMENT OF THE ESCALON GENERAL PLAN.

WHEREAS, The Escalon City Planning Commission has studied and prepared the Proposed Noise Element of the General Plan for the City of Escalon; and

WHEREAS, a public hearing for the purpose of allowing all persons to be heard for or against the Proposed Noise Element was set for the 9th day of December, 1974 at 7:30 P.M., and notice of said hearing was duly published the 27th day of November, 1974 in the Escalon Times; and

WHEREAS, The Planning Commission has considered said Proposed Noise Element.

NOW, THEREFORE, BE IT RESOLVED BY THE ESCALON CITY PLANNING COMMISSION, as follows:

1. The Planning Commission has found the Proposed Noise Element is suitable for the Noise control needs for the controlled development of the City of Escalon, and does hereby recommend to the City Council of the City of Escalon the adoption of the Noise Element.

2. That a certified copy of this resolution be forwarded to the City Council of the City of Escalon by the Planning Commission Secretary as the report of the Planning Commission.

Passed and adopted this 9th day of December, 1974.

AYES: Commissioners: Blixt, DeBie, Miller and Vice-Chairman Stewart.

NOES: Commissioners: None.

ABSENT: Commissioners: Chairman Latta.

/s/ Effie R. Latta
Chairman, Escalon City
Planning Commission

ATTEST:

/s/ Earl Wilson
Secretary, Escalon City
Planning Commission

RESOLUTION NO. 376

A RESOLUTION OF THE CITY COUNCIL OF THE CITY
OF ESCALON ADOPTING THE NOISE ELEMENT OF THE
ESCALON GENERAL PLAN.

WHEREAS, the Escalon City Planning Commission has studied and approved the Noise Element of the Escalon General Plan; and

WHEREAS, a public hearing was duly noticed before the City Council for January 6, 1975, by publication in The Escalon Times on December 25, 1974.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ESCALON, as follows:

1. That the Noise Element of the Escalon General Plan is hereby approved.

2. That the Noise Element shall be endorsed by signature of the Mayor of the City of Escalon, attested by the City Clerk of the City of Escalon, to show that it has been adopted by the City Council.

PASSED AND ADOPTED this 6th day of January, 1975 by the following vote:

AYES: Councilmen: Bodin, Hagan, Polhemus and Mayor Vilen.

NOES: Councilmen: None.

ABSENT: Councilmen: None.

/s/ Carl J. M. Vilen
Carl J. M. Vilen, Mayor

ATTEST:

/s/ Earl Wilson
Earl Wilson, City Clerk

CITY OF ESCALON
GENERAL PLAN
SAFETY ELEMENT

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Planning Commission Resolution No. 75-2

City Council Resolution No. 394

SAFETY ELEMENT OF
THE ESCALON GENERAL PLAN

I

INTRODUCTION

A. GENERAL

The objective of the Safety Element is to introduce safety considerations into the planning process in order to reduce loss of life, injuries, damage to property, and economic and social dislocation resulting from dangerous occurrences. This element recognizes and defines areas of fire, geologic, flood, and crime hazards. Programs to protect the community from such hazards are described and evaluated. Goals are identified for reducing hazards with a specified level of acceptable risk.

The Safety Element relates directly to the land use element and contributes basic standards and requirement to the circulation element. It clarifies and supplements the policies and maps adopted in the Escalon General Plan. This element will also be used to review and update all elements in the General Plan to keep the document internally consistent.

B. AUTHORITY

The specific authority for preparation and adoption of the mandated Safety Element is California Government Code Section 65302.1, which states "..... a safety element for the protection of the community from fires and geologic hazards including features necessary for such protection as evacuation routes, peak load water supply requirements, minimum road widths, clearances around structures, and geologic hazard mapping in areas of known geologic hazards." State guidelines further suggest inclusion of the crime prevention aspects of land use development.

C. PREPARATION HISTORY

Preparation of this element is in conjunction with the one being prepared by the San Joaquin County Council of Governments (COG). Those portions applicable to the Escalon area have been extracted from the COG Element. A summary of the findings in the COG Element is being used in this Element. Further information resulting in the findings may be reviewed in the COG Element.

D. DEFINITIONS

Listed below are terms used in this element. Some of these may be further defined elsewhere in the text.

Acceptable Risk: The level of risk below which no specific action by local government is deemed to be necessary.

Unacceptable Risk: Level of risk above which specific action by government is deemed to be necessary to protect life and property.

Avoidable Risk: Risk not necessary to take because individual or public goals can be achieved the same or less total "cost" by other means without taking the risk.

Defensible Space: Concept of urban space designed to inhibit crime by utilizing the proprietary concerns of residents. Key ingredients in designing defensible space include: Improving the natural capability of residents to visually survey the public areas of their residential environment; enhancing spheres of territorial influence within which residents can easily adopt proprietary attitude; and enhancing safety through the strategic geographical location of intensively used community facilities.

RESEARCHA. IDENTIFICATION AND APPRAISAL OF POTENTIAL HAZARDS1. Fire HazardsIntroduction

The National Fire Protection Association reports that the United States has by far the most fires, fire damage, and death due to fire of any industrialized country. For every 1,000 people in the United States in 1972 there were 13 fires (a total of almost 2.75 million). Australia, which ranked second worst, suffered barely 7 fires per 1,000 persons.

This country's death rate from fire is also nearly twice that of the next ranked industrialized nation (12,000 died from fires in 1972). The situation is not improving. From 1950 to 1972 the number of buildings burned increased by 2/3, property loss quadrupled, and the number of deaths from fire rose 20%. Countywide statistics for evaluation of fire hazards specific to this county are unavailable.

Hazards

a. Structural Fire:

Prevention and extinguishment of structural fires is essential to life and property safety. Once a fire occurs, the risk of damages may be increased by:

- lack of standby power;
- lack of built in fire detection and extinguishment features;
- lack of fire retardent materials on floors, or in attic spaces;
- difficulty in identifying location because of obscure house or apartment numbers, or confusing parcel access (flag lots);
- difficulty in identifying which fire agency is responsible due to irregular jurisdictional boundaries;
- difficulty in reaching some locations quickly due to distance or otherwise poor accessibility;

- lack of adequate water supply or water pressure for fire extinguishment (particularly for scattered industrial or commercial development and where water mains are inadequate in size for peak water supply loads);

Any land development pattern or structural design feature which may hamper the rapid response of fire fighters contributes to the risk of loss of life and severe property damage. Scattered rural homes and other urban development with wells as the sole supply of water carry a high risk because of inadequate water supplies for fire fighting on the property and often poor accessibility to public fire fighting services.

b. Industrial Fire:

In San Joaquin County, lumber yards provide potential for blazes. Manufacturing, storage, handling or transportation of petroleum, chemical and other explosive products also create special fire hazards.

c. Grass and Brush Fires:

Grass and brush fires are an annual hazard during the hot dry summers on unirrigated open land. More than half of the fires occurring outside incorporated cities in San Joaquin County are grass or brush fires. The Division of Forestry classifies San Joaquin County as a critical fire weather area, (Class III) i.e., there are more than 9.5 days of critical fire weather per year. In addition to the dry hot weather, several other factors affect the relative degree of wildland fire hazard. These include "fuel loading", slope steepness, accessibility to human activities, and accessibility to fire fighting equipment.

"Fuel loading" is the type and amount of vegetative fuel available for burning. Steep slopes are a contributing factor to fire hazard severity because they have a fire spreading effect similar to higher winds and are not as accessible to fire fighting equipment. Where there is easy human access to dry vegetation there is higher risk of fire, since a very high percentage of wildfires are caused by people and their activities. Areas particularly susceptible include outlying residential parcels, open lands adjacent to residential areas, and unirrigated parklands.

The Division of Forestry has developed a Fire Hazard Severity Scale for wildland fire hazards. It is based on weather, fuel loading, and slope steepness. Its purpose

is to specify the development requirements and recommendations. The scales are moderate, high hazard, and extreme hazard, the most hazardous. The Preliminary Fire Hazard Map contained in the COG Draft Safety Element indicates that Escalon and the surrounding area is situated in a moderate fire hazard zone.

2. Crime Hazards

In most suburban neighborhoods, theft is perceived as a greater hazard than crimes of violence, and statistics indicate that burglaries are on the increase in suburbs. The number of robberies per 100,000 persons has more than tripled since 1960. The reasons for the increase in this and other types of crime are not precisely known but it is believed to be related to poverty; a significant growth in the last 15 years in the "crime-producing" population--youths, especially males between 15-24 years of age; and increasing numbers of homes which stand empty during the day.

3. Geologic Hazards

Geologic hazards have been covered in the Seismic Safety Element. These include earthquakes and secondary hazards often triggered by earthquakes, i.e., slope stability problems, subsidence, liquefaction, tsunamis, and seiches. For further information regarding these hazards and maps depicting hazard areas, the reader is referred to that element.

4. Flood Hazards

Introduction

Public safety considerations and the magnitude of expected flooding losses in California--6.5 billion dollars between 1972 and 2000 -- justifies consideration of all feasible loss reduction measures.

Over the years, dams, levees and channel improvements have been built to protect people against floods. But people have continued to find waterside land too attractive to resist and have moved into prone lands more rapidly than flood control works have been constructed. The result, according to a March 1973 Sacramento District Corps of Engineers "Information Bulletin," is that flood damages across the nation have steadily increased. In spite of the flood protection programs of the past 30 years, the average annual flood hazard is now greater than before such programs began.

Further, the Corps states, it has been found that some floods simply cannot be prevented, or are not economically feasible to prevent with structural devices such as dams and levees. Yet another consideration is that protective structure can and do encourage urban development into floodplains and increase the potential for loss from the occasional floods that exceed the design criteria of the flood works. The answer thus cannot lie solely with traditional structural means. More and more it lies in combining structural approaches with increased application of local flood plain management programs. The latter involve zoning and subdivision regulations to curtail intensification of floodplain use, floodproof building construction, etc.

Flood Hazard Risk

Flood hazards are estimated as the risk in any year (such as a 1 percent risk), or as an expected frequency of return over a very long period of time (such as a 100 year flood). Both of these terms refer to the same flood. A smaller more frequent flood could be expressed as either the 4 percent risk flood or the 25 year flood. Flood control works are designed to carry a specific size of flood. If a project is designed to carry the 4 percent risk, or 25 year flood, the surrounding area would be protected from that degree of hazard and all smaller more frequent floods, but would still be subject to larger floods with a lower risk of occurrences.

Virtually all federal agencies and many state technical agencies have come to accept a "100 year flood" (often called the "intermediate regional" flood) as the "acceptable risk" standard for protection of urban development against flooding. The federal government is identifying all areas which would be flooded in an "intermediate regional" or 100 year flood as flood hazard areas. Within flood hazard areas new urban development should not occur unless buildings are floodproofed, and existing development should have flood insurance.

Delineation of flood hazard areas is based on historical flooding, topography, wind velocities, tidal surges, and man made preventive devices. The documented areas subject to "100 year flood" or intermediate regional flood as indicated in the COG element show Escalon and the immediate surrounding area as having a history of not being subject to this type of flooding. The COG element also indicates that Escalon and the immediate surrounding area as not being an area of potential flooding. The nearest flood plain area is in the vicinity of the Stanislaus River.

Flooding Causes

Flooding in San Joaquin County can have several causes including:

- levee failure or overtopping
- creek and river overflow
- standing water from excess rainfall or poor drainage
- dam failure

Levee Failure:

A major levee break in the county could cause severe property damage and a hazard to life. Levees in San Joaquin County are located primarily in the Delta region. According to the COG element, this does not appear to be a direct hazard to the Escalon area.

Creek and River Overflow:

Creek or river overflows result when the surface runoff from a watershed exceeds the capacity of the creek channel to carry the flow. In general, a natural creek will carry the flow of a 10-20 year flood. Any larger less frequent flood may cause flooding to some degree outside of the channel itself. Flood control channelization projects can greatly increase the capacity of a stream to carry floodwaters.

Related planning problems: Development in an area increases the frequency and height of floods in a watershed because of a higher percentage of paved over surfaces; reduction of open floodwater storage areas; and storm drain systems and channels which reduce the lag time between rainfall and storm runoff. This results in increased runoff and decreased flood protection downstream. Unplanned for urban development thus can reduce the flood protection capabilities of streams and increase flooding problems.

Inadequate facilities such as small culverts and low bridges impede the flow of storm runoff in channels and may cause localized flooding.

Standing Water:

Standing water from excess rainfall occurs in low lying level areas where impervious or saturated soils prevent the rapid infiltration of rainfall into the ground and where surface drainage is poor.

Damage to crops and other property may result, particularly in a wet year in which water may stand on the land for weeks at a time. Hazards to life from flooding are low, however, a related problem is the risk of well contamination from standing water, particularly of wells which are "in pits" or which do not have pedestals. Health District standards require pedestals and elimination of wells in pits but many older small wells may not yet meet these standards.

Dam Failure:

The risk of flooding from dam failure is not known but should it occur, flooding could be substantial in San Joaquin County. Several large dams are located upstream in the foothills. They include Melones and New Melones Dams on the Stanislaus River. Determining the hazard and potential areas of inundation in the event of dam failure is the responsibility of the State Department of Water Resources, Division of Dam Safety, and the Office of Emergency Services. When inundation maps are available (probably sometime in 1976) they will be included in this Element.

B. HAZARD REDUCTION METHODS

1. Fire Hazards

Introduction

This section primarily describes planning related opportunities which aid in the efficiency of fire protection services and which incorporate fire prevention features into development projects. These features can result in greater public safety at relatively little public cost.

Fire Services

Fire protection for the Escalon area is provided by two volunteer fire protection districts. The Escalon Rural County Fire Protection District and the Escalon Fire Protection District have the same personnel, use the same equipment and operate out of the same station, each has protection responsibilities for portions of the City of Escalon but have separate fire ratings and separate assessments.

All public fire protection agencies in San Joaquin County operate under mutual aid agreements. When a fire agency's normal facilities have been exhausted, other fire departments can be called in to provide assistance at no charge to the responsible fire agency.

Fire Safety Programs

Fire prevention programs include inspection of property for fire hazards, enforcement of weed abatement regulations, and public education programs. Public awareness programs are most important since careless or irresponsible persons are a major reason for dwelling and grass fires.

Development

The City reviews proposed development projects to insure that;

- a. there is an adequate peak load water supply for fire fighting;
- b. road widths and turn around radii are adequate for fire fighting equipment; and
- c. structures are built to the minimum standards of the Uniform Building Code (UBC) and Uniform Fire Code (UFC) regarding the use of fire retardent materials and the incorporation of detection, warning and extinguishment devices.

The Division of Forestry further recommends that development for moderate hazard class rating of one of Fire Hazard Severity be of strict compliance with existing state statutes and local ordinances. State statutes would include Public Resource Code, Sections 4291-4296 and Sections 4371-4375.

For industrial development which create special fire hazards, continuous upgrading of fire control technology and contingency planning is most important. Proposed new industry which manufactures or handles combustible or explosive products should locate away from residential or other highly populated areas.

2. Crime Hazards

Introduction

This section primarily describes planning related opportunities which aid in the efficiency of law enforcement service provision and which incorporate crime prevention features into development projects. These features can result in greater public safety at relatively little public cost.

Law Enforcement Services

Law enforcement services are provided by a number of agencies in San Joaquin County, including the Police Department in the City of Escalon, and the San Joaquin County Sheriff's Department, and the California Highway Patrol. The California Highway Patrol patrols and investigates accidents on state highways and unincorporated county roads.

Sheriff's protection is a large tax cost provided only to unincorporated areas. The rural nature of the county precludes the possibility of constant law enforcement in all areas. The necessity for increased service in areas of scattered development results in less service to the remainder of the rural areas, when manpower and equipment are limited. Special districts, authorized to provide police protection, may be formed although this is generally not a practical approach because of the high cost of providing police service to a limited area.

In some locations irregular jurisdictional boundaries can cause confusion, and delay response to day-to-day emergencies. While jurisdictional problems are difficult to resolve under present annexation laws, confusion on the part of the caller as to who to call could be eliminated by implementation of a uniform 911 emergency telephone number. This would be dialed in any emergency and trained operators would handle the call.

Unclear building or house numbers can also cause delays in response.

Crime Prevention Through Physical Planning and Building Code Standards

Additional hardware such as locks, bolts and alarm systems can partially reduce the risk of theft, particularly by the casual passer-by, but this is less effective against the professional burglar. Citizen action is a more effective means of combating theft and preventing other types of crimes.

Defensible space is a concept of designing buildings and neighborhoods to

- . promote the proprietary interest of residents in neighborhood or apartment complex activities;
- . permit the identification of suspicious happenings or persons (in part by increasing recognition of neighbors); and
- . indicate to the criminal that he would be likely to be apprehend.

Much crime is crime of opportunity rather than pre-meditated crime, according to Oscar Newman. Thus "defensible space design," which tends to promote citizen surveillance and action, is an important concept for reducing crime--and it offers an alternative or supplement to locks and bolts.

The principles of defensible space include:

- a visually well defined separation between public and private areas;
- windows placed for easy resident surveillance of yards, corridors, entrances, streets, and other public and semi-public places;
- landscaping which permits surveillance of open areas and entryways and does not provide places for concealment;
- relating grounds to particular dwelling units in apartment complexes so the residents recognize certain areas as for their use, and take an interest in them;
- subdivision of city streets to create territorially defined blocks and areas (by closing or modifying streets or designing new streets to restrict but not exclude vehicular movement). However, access and adequate turnaround radii for emergency vehicles is important. Street patterns should promote neighborhood observation and recognition but also facilitate patrol observation;
- eliminating undefined hallways, particularly double-loaded corridors, shared by a large number of families. Entries and circulation corridors should be designed so that as few families as possible share a common lobby. This facilitates recognition of strangers;
- well lighted streets, entrances and house numbers;
- well lighted and windowed apartment stairwells where possible;
- well positioned apartment lobbies or condominium recreation rooms that can be surveyed from the street;
- locating kitchen and living areas to facilitate surveillance;
- limiting access into and between buildings so escape routes are fewer and undetected entrance is more difficult.

These design features were shown to provide a greater degree of crime deterrence than did better locks, etc., in urban public housing projects which were studied.

Similar defensible space techniques and other security precautions have been defined for other types of uses.

For Industrial and Commercial buildings the following general principles can be applied:

- landscaping, location of buildings, walls, etc., should facilitate surveillance from the street and from neighboring structures and not provide places for concealment;
- the street system should allow emergency vehicle access around the buildings;
- parking, walkways, etc., should be located where surveillance from streets or from an attendant is possible to reduce worker or customer isolation when walking to and from cars;
- access to buildings or groups of buildings, and access between buildings should be limited so escape routes are fewer and entrance is made more difficult;
- access to roofs by parking structures, pallets, flagpoles, etc., should be eliminated or avoided;
- windows should be held to a minimum on the first floor, if possible, and windows made burglar resistant;
- buffer zones--walls, parks, busy streets, should be provided between industrial and commercial areas, and surrounding areas to make it more difficult to escape unseen;
- if possible, areas should be designed so they can be sealed off when not in use;
- alarm systems should be installed if possible on a zone basis so the entire area does not have to be sealed off in an emergency;
- street names and building numbers should be well lit for easy identification.

Recreational area crime prevention features include:

- good lighting;
- designs which facilitate surveillance from streets and nearby buildings;
- location of park buildings and high use activities near streets.

Many defensible space principles are more difficult to apply in low density suburbs or semi-rural areas where the desired lifestyle requires features which separate each home from others and from the road. In these areas, citizen action within the existing physical setting can be effective in reducing crime.

A Neighborhood Alert program sponsored by the Contra Costa County Criminal Justice Agency included fostering acquaintance among neighbors, fostering an attitude of caring for neighboring property, permanent identification marking of household items, and signs on property indicating valuable items had been marked. (Operation ID). Two weeks after this Neighborhood Alert program was instituted in West Pittsburg, all crime was reduced by 50%. Similar reductions in burglary were noted in other neighborhoods. There were marked increases in calls to law enforcement agencies from residents reporting suspicious circumstances; also there was an unwillingness of thieves or fences to take marked property.

In addition to the above approaches, at least two jurisdictions (The County of Los Angeles and the City of Oakland) have incorporated crime prevention security measures into their building codes. In commercial areas, building codes require certain types of locks on doors and windows, reinforced door jamb construction, hinges with nonremovable pins, door constructions which cannot be kicked or broken through easily, adequate lighting, certain windows made of burglar resistant materials, and locking or securing any hatchways, air vents, air ducts or skylights of a certain size. In residential areas building codes cover exterior door and door jamb construction, locks for doors and windows, some window constructions (notably louvered windows) and hinges.

Informal advisory services may also be provided to business owners, firms, builders or homeowners to show them how buildings may be made more secure. .

3. Flood Hazards

Introduction

This section describes existing available programs and planning methods to reduce the risk of potential flood hazards for existing and proposed development. These methods include corrective and preventive measures.

Flood Control Agencies and Safety Programs

National Flood Insurance Program: On December 31, 1973 the Flood Disaster Protection Act of 1973 became law. This act is the first to establish meaningful floodplain and land use standards. Its intent is to

- strengthen or implement flood plain management programs in flood hazard areas to halt indiscriminate building;
- expand the flood insurance program to substitute and eventually replace federal disaster relief for flood occurrences;
- better inform persons about flood hazard

The key to the act is that 1) federal financial assistance for acquisition and construction purposes and 2) federally-related financing by private lending institutions will be defined in areas identified as flood hazard areas unless the community is participating in the national flood insurance program so that flood insurance is available to the project. Also, property owners in flood hazard areas must purchase flood insurance as a condition for future federal assistance. Flood hazard areas are defined as those areas which would flood in a "100 year flood."

The City of Escalon has not subscribed to the flood insurance program, however, the County has. Participation in the National Flood Insurance Program means that:

- 1) The Department of Housing and Urban Development (HUD) notifies the community of potential flood problems sends applications and sample land use resolution;
- 2) The community must agree to enforce adequate flood control regulations within 100 year flood hazard areas (when defined by the federal government) and applies for eligibility to the flood insurance program;
- 3) Flood insurance is made available at subsidized rates to persons in the community;
- 4) HUD issues Flood Hazard Boundary Map(s) delineating flood hazard areas in the community (these maps can be appealed by the community) then contracts with a technical agency (the Army Corps of Engineers in San Joaquin County) for insurance rate studies. Upon receipt of the Flood Hazard Boundary map, landowners or builders must purchase flood insurance to qualify for any federal assistance (FHA or VA loans, private bank loans insured by the FDIC...);

- 5) HUD provides the community with a Flood Insurance Rate Map which is the result of detailed engineering study, and 100 year flood elevation data. This data can also be appealed by the community;
- 6) Upon receipt of (5) above, the community is given 6 months to adopt regulations in its local zoning and building code ordinances which apply to flood hazard areas and which are at least as restrictive as federal minimum standards;
- 7) Subsidized insurance continues to be available for existing construction but not for buildings constructed within the flood hazard area after the Flood Insurance Rate Map publication date. However, a actuarial insurance will be available for new construction, thus if buildings are properly floodproofed insurance rates are lowered.

It is the responsibility of local building and planning agencies to inform persons of possible flood hazards when preliminary flood hazard information is available. As of September 1975, the cities in San Joaquin County have received Flood Hazard Boundary Maps but no insurance rate maps. The County has not yet received Flood Hazard Boundary Maps.

The federal government has been and is also involved through the Army Corps of Engineers and the Soil Conservation Service in constructing and maintaining some flood control channels, dams, and levees in San Joaquin County. The Corps publishes flood plain information reports and will provide flood hazard reports upon request for selected projects of areas.

State Programs:

State government direct participation in development of flood control projects has been relatively limited, partly because of the dominant responsibility assumed by the Federal Government. The State's functions are largely oriented to planning and information and involve:

- maintain of flood warning system;
- investigation of lands subject to inundation and overflow.

In times of flood emergency, the Department of Water Resources maintains and repairs levees.

Local Programs:

The San Joaquin County Flood Control District, a division of the County Public Works Department, plans and constructs flood control works in the county in partnership with the Corps of Engineers and the Soil Conservation Service. It is the sole design and construction agency for many county flood control projects. The District approves drainage and flood control works to be constructed by land developers. It also approves agricultural land levelling permits.

Flood Hazard Planning

Where plans show urban expansion is likely to occur in the near future, flood control works should be designed to provide urban levels of flood protection. Conversely, urban development should not be encouraged where only rural levels of flood protection are provided.

In addition to coordinating flood control projects with land use, planning is important in identifying flood hazard areas and in making this knowledge widely available.

Flood plan regulations are preventive measures which restrict use of land and specify construction standards to be met in flood hazard areas. Zoning, subdivision regulations and building codes are the implementing tools. Planning and Building Department responsibilities involve utilizing these tools and informing project proponents about the range of adequate preventive methods available to each site.

In summary, planning responsibilities are to promote public safety by

- maintaining an updated set of flood hazard maps in the planning department;
- maintaining and distributing information regarding methods available for flood hazard reduction such as flood proofing;
- preparing flood plain management regulations;
- reviewing flood hazards in Environmental Impact Reports;
- informing the public of flood hazard areas.

Evacuation planning is a further corrective measure which reduces loss of life and injuries although it will have little effect on property damages.

At the present time, the County Office of Emergency Services has no evacuation routes drawn up. In the event of a disaster that permits use of the streets, the major streets would probably be used as the main evacuation routes.

The policy of having mapped evacuation routes seems to have been abandoned by the Federal government, in the belief that the panic and confusion, resulting from the evacuation attempts, is probably a greater hazard than the damage from the disaster itself.

However, the State of California, through SB 1632, signed May 31, 1974, now requires jurisdictions to adopt emergency procedures for the evacuation and control of populated areas below those dams whose failure would cause loss of life or personal injury. The evacuation plans are to become a part of local emergency plans. In order to help affected jurisdictions develop evacuation plans, the State Office of Emergency Services (OES) will hold conferences at the local level. OES is scheduled to hold a conference on evacuation plans for San Joaquin County in November, 1975, providing all the inundation maps for dams that might impact San Joaquin County are finished.

The following guidelines are given for evacuation routes, for use by planners and in the interest of public safety.

Evacuation routes should be maintained with adequate width for a minimum of two travel lanes plus two emergency parking lanes. They should lead to emergency shelter facilities such as schools and other suitable public buildings. Fire stations and emergency medical facilities should be carefully located with respect to evacuation routes to assure rapid access and yet avoid evacuation traffic congestion which would inhibit their proper function. All street systems should have at least two exits to permit evacuation if one exit is blocked. In addition, designated evacuation routes might be elevated so they are usable in the event of flooding.

ACCEPTABLE RISK

A central concept to community hazard reduction is "acceptable risk." The concept of "risk" involves both awareness and choice (decision-making). It involves the voluntary taking of a certain degree of risk. It also involves the element of probability (the chance that a given event will occur). If a person is generally unaware of a hazard, that individual cannot by definition make a choice, and therefore, that person is not voluntarily taking a risk. Generally, it falls upon the city or county to take the responsibility to educate the public as to the risks involved in the surrounding environment.

For a given hazard, a wide range of adjustments are possible. Those affected can either try to

- modify the hazard (build a dam, levee system...)
- modify the loss potential (land use changes, warning systems...)
- spread the loss (disaster relief, subsidized insurance...)
- or bear the loss.

A city or county cannot reasonably reduce all sources of danger to its citizens since natural and man-made hazards of some kind and degree are always present.

People or communities faced with different hazards make decisions to reduce a hazard based on their perception of it, the range of choice open to them, and the economic viability and efficiency of the alternatives. They then, through various programs, reduce the hazard risk to a certain level.

The remaining degree of risk becomes "acceptable." A defined level of "acceptable risk" simply refers to those risks that, for a number of reasons, cannot or are not being currently reduced. That level will constantly change as more knowledge is acquired, additional resources are generated, or priorities shifted.

Acceptable risks then are really "tolerated risks:" perceivable risks to life and property that are not currently being reduced due to technological limitations, limited resources or conflicting priorities. Unacceptable risks are perceivable risks to life and property that must be reduced through ongoing government action programs.

The concept of tolerated risk is important in defining the risks the community will not accept, and devising programs for their elimination. Policy makers can try to ameliorate the many "avoidable risks" which are generally apparent and which may contribute to hazards resulting from carelessness, lack of attention to safeguards or failure to conform to existing safety standards. Public information programs can be effective in reducing risks.

Policy should also be directed to reducing unacceptable risks to the "tolerated risk" level, which might be reached to a substantial degree in most of the planning area through consistent enforcement of existing (and new, if needed) codes and regulations pertaining to building construction, flood hazard areas, land development design, and fire safety standards, etc. Tolerated risks, or those not currently being reduced, should be reassessed periodically, to consider cost, benefits, and priorities, in order to ensure public safety.

STATEMENT OF DEVELOPMENT POLICIES

A. OBJECTIVE

It is the objective of the City of Escalon to achieve for all residents in Escalon City a minimum of risk to life, personal safety, and property.

B. GUIDING PRINCIPALS

In order to achieve the objective of the safety element, the following guiding principals will be used by the City of Escalon in implementing the plan proposal in the City.

1. Provide an overview of selected public safety issued in the City;
2. Identify natural and man-made features which have potential for causing a disaster of local or area wide proportions;
3. Review actions to minimize the risk of widespread and persistent hazard to life and property. It is assumed that actions which affect hazards to life will generally have a higher priority than actions which primarily affect property;
4. Delineate means by which public safety consideration can be incorporated into planning functions.

C. STANDARDS

1. Uniform Building Code, 1973 Edition, published by the International Conference of Building Officials.
2. City Emergency Plan, 1973. This Plan establishes the emergency services organization and the procedure to handle various types of emergencies.

D. PLAN PROPOSALFire:

1. Continue review of development standards as to their adequacy regarding fire hazards, and correct unacceptable shortcomings.

2. City Planning Department investigate whether fire hazardous land use relationships exist, and if so, propose methods to reduce risk to acceptable levels.
3. Industries manufacturing or handling inflammable or explosive material be located away from centers of population.
4. Encourage development of an expanded fire education program.
5. In order to insure prompt public protection services, dwelling unit numbers be required to be easily seen from the street or road.
6. Because of confusing access problems, flag lots be prohibited.

Crime:

1. Planning Department in cooperation with Police Department develop guidelines for Defensible Space design at build- and subdivision projects; and review projects to insure that crime inviting features are mitigated;
2. Dwelling unit numbers be required to be easily seen from the street or road;
3. To reduce the risk of crime at little public cost, encourage the use of citizen action programs such as Neighborhood Alert and Operation ID.
4. Consider adding security measures to building codes.

Flood:

1. Flood hazard reports be requested from the Corps of Engineers for major projects or projects involving key facilities in areas of potential flooding even though they are located outside of "100 year" flood hazard areas.
2. Future urban development be limited to areas with protection from "100 year" floods.
3. Information be obtained and distributed regarding methods available for flood hazard reduction.
4. Flood hazards be noted on parcel or subdivision maps.

BIBLIOGRAPHY

1. General Plan Guidelines, California Council on Intergovernmental Relations, September 20, 1973.
2. Draft Safety Element, San Joaquin County Council of Governments, September, 1975.
3. City Emergency Plan, City of Escalon, September 10, 1975.
4. Uniform Building Code, Volume I, International Conference of Building Officials, 1970 Edition

Adopted by Resolution No. 75-2 of the Escalon City Planning
Commission this 10th day of November, 1975.

ATTEST:

/s/ D. B. Stewart
D. B. Stewart
Chairman

/s/ Earl Wilson
Earl Wilson
Secretary

Adopted by Resolution No. 394 of the Escalon City Council
this 1st day of December, 1975.

ATTEST:

/s/ Carl J. M. Vilen
Carl J. M. Vilen
Mayor

/s/ Earl Wilson
Earl Wilson
City Clerk

RESOLUTION NO. 75-2

A RESOLUTION OF THE ESCALON CITY PLANNING COMMISSION
RECOMMENDING APPROVAL OF THE SAFETY ELEMENT OF THE
ESCALON GENERAL PLAN.

WHEREAS, The Escalon City Planning Commission has studied and prepared the Proposed Safety Element of the General Plan for the City of Escalon; and

WHEREAS, a public hearing for the purpose of allowing all persons to be heard for or against the Proposed Safety Element was set for the 10th day of November, 1975, at 7:30 P.M., and notice of said hearing was duly published the 22nd day of October, 1975 in the Escalon Times; and

WHEREAS, The Planning Commission has considered said Proposed Safety Element.

NOW, THEREFORE, BE IT RESOLVED BY THE ESCALON CITY PLANNING COMMISSION, as follows:

1. The Planning Commission has found the Proposed Safety Element is suitable for the Safety needs for the controlled development of the City of Escalon, and does hereby recommend to the City Council of the City of Escalon the adoption of the Safety Element.

2. That a certified copy of this Resolution be forwarded to the City Council of the City of Escalon by the Planning Commission Secretary as the report of the Planning Commission.

Passed and adopted this 10th day of November, 1975.

AYES: Commissioners: Blixt, deBie, Latta, Miller and
Chairman Stewart

NOES: Commissioners: None

ABSENT: Commissioners: None

/s/ D. B. Stewart
D. B. Stewart, Chairman, Escalon
City Planning Commission

ATTEST:

/s/ Earl Wilson
Earl Wilson, Secretary

RESOLUTION NO. 394

A RESOLUTION OF THE CITY COUNCIL OF THE CITY
OF ESCALON ADOPTING THE SAFETY ELEMENT OF THE
ESCALON GENERAL PLAN

WHEREAS, The Escalon City Planning Commission has studied and approved the Safety Element of the Escalon General Plan; and

WHEREAS, a public hearing was duly noticed before the City Council for December 1, 1975, by publication in the Escalon Times on November 19, 1975;

NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ESCALON, as follows:

1. That the Safety Element of the Escalon General Plan is hereby approved.

2. That the Safety Element shall be endorsed by signature of the Mayor of the City of Escalon, attested by the City Clerk of the City of Escalon, to show that it has been adopted by the City Council.

PASSED AND ADOPTED this 1st day of December, 1975 by the following vote:

AYES: Councilmen: Bodin, Focha, Hagan and Mayor Vilen

NOES: Councilmen: Polhemus

ABSENT: Councilmen: None

/s/ Carl J. M. Vilen
Carl J. M. Vilen, Mayor

ATTEST:

/s/ Earl Wilson
Earl Wilson, City Clerk

CITY OF ESCALON

GENERAL PLAN

HOUSING ELEMENT

First draft - October 13, 1980

Second draft - November 20, 1980

Third draft, as approved by Planning
Commission at their December 8, 1980
regular meeting - December 10, 1980

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INTRODUCTION

The purpose of this Element of the City of Escalon's General Plan is the formulation of an official policy position that will lead toward the provision of safe, healthy, and affordable housing for all existing and future Escalon residents. It is recognized that the complete attainment of all of the goals contained in this document will be difficult, if not impossible. Nevertheless, it is felt that use of the policies and programs presented will lead to the greatest possible impact on housing needs which can be accomplished using available resources.

This Element is intended to satisfy both Federal and State requirements for local housing planning. The contents and organization closely follow the "Housing Element Guidelines" developed by the California Department of Housing and Community Development.

This Element contains four basic sections:

Existing Data. This section examines the various data related to the provision of housing in Escalon. Presently available 1980 Census data has been used; a format is used which will allow for inclusion of additional 1980 Census data when it becomes available.

Housing Needs and Constraints. Housing needs are assessed on the basis of an analysis of available data. A reexamination of housing needs will be undertaken after receipt of 1980 U. S. Census data. Obstacles to meeting housing needs, including market and governmental constraints, are examined.

Housing Program. Existing housing-related actions and programs are described, and recommendations are made for modification or augmentation of present efforts. Existing housing-related goals and policies are brought together and organized according to State Housing Element Guidelines. These goals and policies, it should be emphasized, do not represent a change in direction but rather a consolidation of existing policy/goal directives.

Environmental Impact Report. This report is designed to comply with the requirements of the California Environmental Quality Act (CEQA). The report examines all of the potential negative impacts of the housing program and proposes possible mitigation measures.

Regional Setting

The City of Escalon is located in the southeastern corner of San Joaquin County, near the center of the Great Central Valley of California. The nearest large urban centers are Modesto, about nine miles to the south in Stanislaus County, and Stockton, about twenty miles to the northwest in San Joaquin County.

Escalon is surrounded by some of the nation's richest farmlands. Rice fields and pastures stretch to the north and east of the City, while orchards and vineyards predominate to the south and west.

Economy

Escalon's economy has historically been based upon activities related to agriculture. At present, there are two wineries and a cannery in the community. There is also a full range of retail establishments, a large proportion of whose customers are farmers from the surrounding area. In recent years, non-agriculture-related activities have become increasingly important to the City's economy. The single largest industrial operation in Escalon is now a steel fabricating plant. Many Escalon residents commute to jobs in Modesto or Stockton.

Table I shows peak employment estimates (excluding agricultural employment) for Escalon for 1970 and 1995.

Population

Table II contains population figures for the City of Escalon for the 1960, 1970, 1975, and preliminary 1980 censuses.

The Escalon population has consistently increased at a faster rate than that of San Joaquin County as a whole. It increased by 73% between 1960 and 1980, while the County population increased by 35%. The Escalon population now comprises nearly 1% of the total County population.

Racial Composition

Figures for racial composition are not available for the City of Escalon. Those in Table III are for the entire Escalon Planning Area.

The white racial category includes all persons with European backgrounds. This means that most persons with Spanish surnames were counted as white, and tabulated a second time under the category Spanish surname.

The number of Escalon Planning Area residents with Spanish surnames nearly doubled between 1960 and 1970. The Spanish surname category was not tabulated in 1975, but it appears reasonable to assume that the percentage of Spanish surnamed persons has continued to increase in the City of Escalon as well as in the Planning Area as a whole.

Age Characteristics

Figures on age characteristics are available for the City of Escalon for 1960 and 1970, but not for later years. They are available for the Escalon Planning Area for 1960, 1970, and 1975 (Table IV).

Most age categories in the City of Escalon showed relatively small changes in percentage of the City population between 1960 and 1970. There was a surprising drop in the absolute number of residents 65 years old and older. There were also reductions in percentages of residents in the under 4 and 30-39 categories, although absolute numbers of persons in those categories increased.

In the Escalon Planning Area as a whole, the average age of the population has been increasing since 1960. The actual number of children under 10 declined by nearly 100 between 1960 and 1975, although the total population increased by 1360. During the same period, the over 50 population increased by 518, accounting for nearly 40% of the total population growth. The extent to which changes in age categories for the period 1970-1975 for the City of Escalon have paralleled those for the Escalon Planning Area is uncertain.

Housing Units and Households

The number of housing units in Escalon has consistently increased at a faster rate than population, and has shown an unusually high percentage increase (7%) between 1975 and 1980. Except for the period 1970-75, the rate of increase in number of housing units for Escalon has exceeded that for San Joaquin County as a whole. Currently, 1% of the housing units in the County are in Escalon (Table VIII).

At present, no Escalon residents are living in group quarters.

The rate of increase in number of households in Escalon has paralleled the increase in number of units except for the 1975-80 period, during which it has been lower. It has consistently exceeded the rate of increase in number of households in the County as a whole. Currently, 1% of the households in the County are in Escalon.

The average household size has consistently been slightly smaller in Escalon than in the County as a whole.

As in the County as a whole, a reduction in average household size has paralleled a rate of increase in the number of households which has exceeded the rate of population growth. Factors operating on a nationwide level which may be responsible for this include:

- 1) An aging population which means longer occupancy requirements for the population.
- 2) Smaller average family size, which means a reduction in the household size (persons per unit) and therefore more housing units per population.
- 3) An increase in the rate of marital disruption.
- 4) An increase in numbers of one parent families and one person households.
- 5) A large increase in the percentage of females over 14 who have never married.

All of these factors will continue to have a profound effect on not only the quantity, but the type of housing needed to meet the demands for housing. They will be further discussed in the Housing Needs section.

Vacancy Rates

Escalon has consistently had a lower total vacancy rate than the County as a whole. As with the County as a whole, its vacancy rate reached a relatively high level in 1980, paralleling a decrease in the ratio of households to total housing units which occurred between 1975 and 1980 (Table VIII).

Figures showing numbers and percentages of vacant units for sale and for rent are not available for the City of Escalon. For the Escalon Planning Area, the percentage of vacant units for rent approximately doubled between 1960 and 1970, while the percentage of vacant units for sale declined slightly. This would seem to parallel an increase in the ratio of renter occupied to owner occupied units which has been documented for the City of Escalon for the same period.

Household Income

The 1970 Census is the latest source of information on family income, but it can be assumed that the median income for Escalon has risen considerably since that time, along with that for the rest of California.

For analytical purposes, actual dollar figures are not as important as the relationship of the median income for the City of Escalon to that for the County as a whole, and the number of Escalon families with incomes significantly below the poverty level.

In 1960 and 1970, the median family income for the City of Escalon was significantly lower than that for San Joaquin County as a whole. In both years, there were higher percentages of families with less than 80% and less than 50% of the median County income in Escalon than in the County as a whole (Table IX).

Somewhat paradoxically, in 1970 a lower percentage of families were living below the poverty level in Escalon than in the County as a whole (Table X). This can probably be explained by the fact that the average household population has consistently been smaller in Escalon than in the County as a whole, since poverty level is determined by the relationship of family size to income (Table V).

Table X shows that families headed by females were much more likely to be below the poverty level than the average Escalon family in 1970. However, it also shows that only about two out of ten female-headed Escalon families were considered poor, as compared to four out of ten female-headed families in the County as a whole.

Table X also shows that a higher proportion of households occupying rental housing than of homeownership households were below the poverty level in Escalon. Again, however, the percentage of renter households considered poor was considerably lower in Escalon than in the County as a whole, while the percentage of poor homeowner households in Escalon was also somewhat lower than in the County.

No figures are available for poverty rates by ethnic background in Escalon.

In summary, it appears that Escalon residents as a group are somewhat less prosperous than residents of San Joaquin County as a whole. At the same time, actual poverty appears to be less common in Escalon than in the County at large. The City may perhaps be characterized as a "middle-income" community in a very real sense.

Housing Costs

Figures for housing costs are not available for the City of Escalon. In the Escalon Planning Area, the average sale price of single family homes has consistently been lower than that in San Joaquin County as a whole. However, the average sale price has risen at a faster rate in the Escalon Planning Area than in the County as a whole, by an average of 25% per year between 1975 and 1979 (Table XI). If the Planning Area figures are reasonably representative of the City of Escalon, it appears very likely that homeownership is being priced out of the reach of more and more Escalon residents, particularly in view of current high interest rates. It is anticipated that 1980 Census figures will show a decrease in the percentage of homeowner households, and an increase in the percentage of renter households.

The latest available figures for rent as a percentage of income are for 1970. In that year, a smaller percentage of Escalon residents reported paying more than 25% of their income for rent than in the County as a whole. However, a larger percentage of those in the lowest income bracket (under \$ 5,000) reported paying over 25% of their income than in the County as a whole (Table XII). If rents have accelerated along with home sale prices since 1970 (as would appear to be the case) the proportion of Escalon residents paying a high percentage of their incomes as rent has probably increased.

Condition of Housing

A field survey of all residential structures in the City of Escalon was conducted in August 1980 by the Escalon City Planning Department in cooperation with the San Joaquin County Planning Department and the San Joaquin Council of Governments.

The survey found a total of 1117 residential structures (including single family houses, duplexes, and multi-family structures) within the City limits.

The overall condition of Escalon's housing stock is good. The survey found that over half (55%) of the residential structures were completely sound, either new or in need of some maintenance. An additional 36% had relatively minor structural deficiencies. Only 6 percent had major repairable structural deficiencies, and only 2% were considered to be unrepairable and in need of replacement (Table XV).

Age of Housing

The August, 1980 housing survey also assessed the ages of residential structures. It was determined that a major part of the City's housing stock is relatively old; 41% of the structures are more than 25 years old, while an additional 31% are between 10 and 25 years old (Table XVI). In absolute numbers, more residential structures were built between 1970 and 1980 than were built between 1960 and 1970 or between 1950 and 1960. Because the total number of structures in Escalon has increased, however, the percentage of residential structures that are less than 10 years old has remained about the same since 1960 (Table XVI).

Overcrowding and Mobility

In 1960 and 1970, the percentages of overcrowded and severely overcrowded units were lower in the City of Escalon than in San Joaquin County as a whole. Furthermore, both absolute numbers and percentages were lower in Escalon in 1970 than they had been in 1960 (Table XVI).

It is anticipated that as average household sizes decline the problem of overcrowding may become less serious in Escalon, as in the County as a whole.

Table XVII shows the length of occupancy of housing units by household in the City of Escalon and in San Joaquin County, in 1960 and 1970. It is apparent that a higher proportion of Escalon households than County households had lived in their present dwelling units for six or more years in both 1960 and 1970. It is also apparent that the number of Escalon residents who had lived in their dwellings for six years or more increased between 1960 and 1970.

Housing Sites

The Land Use Element of the Escalon General Plan to 1995 designates 655 acres of presently vacant land for residential development. Of this land 530 acres are designated Low Density Residential (2 to 6 dwelling units per gross acre) and 125 acres are designated Medium Density Residential (6 to 15 units per gross acre).

A maximum of about 5055 new units (3780 Low Density and 1875 Medium Density) could be accommodated.

It is anticipated that the Low Density Residential areas will accommodate primarily single family residences with occasional duplexes, although some multi-unit structures would be possible with planned unit development.

The Medium Density Residential designation is used primarily for planned buffer areas between commercial areas and Low Density Residential development.

Housing Needs

An assessment of the housing needs of all economic segments of the community is a prerequisite for the development of policies and programs which will be effective in alleviating housing problems. In this section housing needs will be discussed in terms of a) prospective need for market-rate housing over a five year period, from 1980 to 1985, and b) immediate housing needs analyzed with respect to affordability, overcrowding, substandard housing, and the housing needs of special groups.

Projected Need for Market-Rate Housing

Figures for projected need for market-rate housing in the City of Escalon are based on projected figures for 1980 and 1985 population and housing for the Escalon Planning Area (prepared prior to the 1980 Census) and on the 1980 Housing Survey of the City of Escalon. The figures will be revised as 1980 Census data become available.

Total projected need for market-rate housing from 1980 to 1985 is approximately 146 units, including 119 new units to accommodate increase in the number of households, and 27 units to replace existing structures lost to the housing stock. About 29 new units will have to be built per year to meet this need. On the basis of building permit data for the last few years, it appears that the private market mechanism will be able to construct the units required.

Methodology

In determining basic new construction need, the 1978 population and housing estimate for the Escalon Planning Area was adjusted to 1980 and compared with the 1985 population and housing projection for the Planning Area which had already been prepared. This process involved determining household population, group quarter population, vacancy rate, persons per household and occupied housing units for 1978 and 1985 and interpolating to arrive at the 1980 base year figures. The resulting figures were modified after considering the decrease in household size, the increase in the rate of marital disruption, and the increase in the number of one person households.

Housing replacement need was based on the 1960 to 1970 rates of loss for housing units constructed before 1939 and those constructed from 1940 to 1949. The rate of loss of post-1950 housing was not considered to be significant. Pre-1939 housing units and housing units built from 1940 to 1949 were "survived" from 1970 to 1980 and to 1985 using these rates and the loss was then calculated.

Immediate Housing Needs

Affordability. In 1980, 159 City of Escalon households were estimated to be lower income (earning less than 80% of the County median income) households paying more than 25% of gross household income for housing.

About 10% renter households were in this category, as were about 52 homeowner households.

In determining the number of lower income renters paying excessive rent, the number of 1980 renter occupied housing units was calculated based on the difference in the percentage of multi-family units from 1970 to 1978 and in the percentage of single family owner occupied units from 1960 to 1970. This figure was then multiplied by the 1970 percentage of renters paying excess rent and earning less than 80% of the County median income.

The extent to which lower income homeowners experienced burdensome housing expenses could not be determined directly from existing data. To obtain what was felt a conservative estimate of such households, the 1970 percentage of owner-occupied households below poverty level was multiplied by the number of 1980 owner-occupied units.

A reason for the large number of renters paying more than 25% of their gross household incomes for rent is the current scarcity of rental units in Escalon. The low supply coupled with relatively high demand has driven rents up; the Escalon Building Department estimates the rent on a typical two-bedroom apartment to be in the neighborhood of \$ 230 per month.

Overcrowding. About 108 Escalon households are believed to be living in overcrowded units.

The rate of overcrowding for 1980 was determined on the basis of the difference in the percentage of overcrowded units from 1960 to 1970. This rate (2% of all households) was then multiplied by the total number of households in Escalon.

Shortage of Rental Units. No exact figures are available for numbers of units available for rent, as opposed to units vacant for sale or other reasons. However, there is a widespread feeling among Escalon residents that there are not enough units available for rent, particularly at affordable prices.

Substandard Housing Units. In 1980, 213 residential units (17 % of the total) were substandard. Standard units were considered to be those in structures found to be in need of major repairs or to be in need of replacement, in the 1980 Housing Condition Survey.

Housing Needs of Special Groups

Elderly/Handicapped. In the City of Escalon in 1980 there were an estimated 21 households headed by elderly and/or handicapped persons which were in need of some form of housing assistance. To arrive at this estimate, the number of needy elderly/handicapped households was obtained from Table 2 "Low Income Households Requiring Assistance" of the Fair Share Housing Allocation Plan of the San Joaquin County Council of Governments (COG). This figure was adjusted to obtain a 1980 estimate.

Large Families. There were about 34 large families (five or more persons each) in need of some form of housing assistance in Escalon in 1980. To determine this figure the figure for large families needing housing assistance was obtained from Table 2 of COG's Fair Share Housing Allocation Plan, and adjusted to 1980.

Minority. There were about 96 minority families in need of housing assistance in Escalon in 1980. To determine this figure, the Countywide total of minority families requiring assistance, shown in Table 2 of the Fair Share Housing Allocation Plan, was adjusted to obtain a 1980 estimate. An estimate of the percentage of this total residing in Escalon was then made on the basis of the percentage of the total number of families below the poverty level with minority heads in the County residing in Escalon in 1970 (Table X), with the assumption that the percentage of minority persons rose in the City of Escalon between 1970 and 1980 at the same rate as it did in the Escalon Planning Area between 1960 and 1970 (Table III).

Fair Share Housing Goal

The State of California Department of Housing and Community Development revised the guidelines for the housing element of the General Plan in November, 1977. The new guidelines state that it is not enough for a locality to measure its housing needs in terms of its resident population. Each locality within a general housing market area shares with other localities the collective responsibility of making adequate provision for the housing needs of all economic segments of the market area population. Therefore, the housing element must also be responsive to the housing needs of a fair share of those households who do not live in the locality but whose housing opportunities are affected by the planning decisions of the locality.

A general housing market area is a regional geographical unit within which local interaction has resulted in an economic and social interdependence with respect to the provision of housing, employment and service opportunities. San Joaquin County constitutes the market area of which Escalon is a part.

The San Joaquin County Council of Governments (COG) has been given the responsibility of preparing a fair share allocation plan to distribute assisted housing units throughout the San Joaquin County general housing market area. The purposes of the plan are:

- . To provide a common measure of local responsibility to meet lower income housing needs.
- . To establish a minimum goal for each locality to adequately meet its existing and projected need.
- . To expand the range of locational choices within the market area for lower income households.

Method of Allocation

The fair share allocation formula is made up of three components: current need, suitability, and fair share. The housing assistance plan format and definitions were used to determine the existing housing assistance needs. To determine the suitability of an area to provide access to needed services and employment, three factors were analyzed: housing starts, holding capacity, and employment opportunities. To insure that no area is currently overburdened with low income housing needs, the three fair share factors were examined: lower income households, unemployment, and subsidized units.

Need and suitability were determined as a percentage of the total County. These two components were averaged together to arrive at the suitability adjustment. The concentration factors were averaged, then added to the suitability adjustment to arrive at the final allocation percentage for each sub-area. The sub-area percentages were multiplied by the total County need to determine total existing need throughout the County. To establish a minimum goal that sub-areas could reasonably be expected to meet, HUD stated that 5% of the current need would be an acceptable one year goal. The sub-area percentages were multiplied by the County minimum goal to arrive at the localities' minimum goals.

Escalon Fair Share Goal

Table XXII shows the Fair Share housing goal for the City of Escalon which has been developed by the Council of Governments. It represents the number of non-market rate (publicly assisted) housing units which would be required to meet the estimated needs of the City's low and moderate income population and to accomodate an equitable number of low and moderate income residents from other parts of the County.

Market Constraints in Meeting Housing Need

Market factors which affect the cost of housing in Escalon include construction costs, land costs, and the availability and price of money.

The focus of this section is on how these costs will affect meeting the housing need established for Escalon. Costs change so radically from year to year no attempt is made to project future costs. The purpose is to outline the factors comprising the cost of meeting the housing need and to make note of those factors which are peculiar to Escalon and are significant obstacles to current and future development in the area.

Cost of Construction

Costs of construction and repairs are difficult to determine because of accelerating inflation. In addition, the cost of a house depends upon its size, location, and the quality of materials used in its construction.

Discussions with contractors and building officials indicate that there is little difference in per square foot costs for single family residences in various parts of San Joaquin County. The main factor which could make a difference in the cost of housing within the County is whether or not union labor is used.

The magazine, Building Standards, estimates the average cost of residential construction in different parts of the country. In January, 1979 they estimated the cost per square foot for an average quality single family residential building in an area like San Joaquin County at \$28.70 per square foot. Custom-built houses cost \$37.86 per square foot. Thus, an average 1,500 square foot house would cost approximately \$43,000 and an average 1,000 square foot house \$28,700. These costs are based on meeting the standards of the Uniform Building Code and include all construction costs plus a 10 percent profit. They do not, however, include the price of the land. If a single family structure were four times the value of the lot it is built on, the sale price of the average 1,500 square foot house in San Joaquin County would approximate \$53,800; the average 1,000 square foot house nearly \$35,900; a custom house of 1,500 square feet almost \$71,000. These figures do not include the cost of a private garage.

Although the impact of inflation on construction costs is hard to estimate, a comparison of average values of building permits issued in the City of Stockton over a ten year period, from 1969 to 1979, reveals a 145% increase in average value of structure from \$19,500 to \$47,700. In the same period the average single-family residence in the County increased 121% from \$20,900 to \$46,100. These differences in average value reflect not only different construction costs between Stockton and the County, but differences in size of the unit being built. The toll of inflation over the ten year period is most likely closer to the 14.5% annual increase in Stockton than the 12.1% increase in the County. This increase in value does not include the price of land.

It is also difficult to estimate the cost of redevelopment and renovation because usually this is done on a project basis. However, some figures are available from projects currently underway or just completed. For projects in the City of Stockton, the estimated average cost of major rehabilitation is between \$16,000 and \$25,000 per house or about \$25 per square foot.

Improving the existing housing stock by either renewal or code enforcement requires improvement (frequently construction) of public facilities (curbs, gutters, sidewalks, sewers, storm drains and street repair). While these services usually are publically funded, their cost is an integral part of improving or redeveloping a residential area. City of Stockton estimates these public facility improvements cost from \$40 to \$60 per lineal foot. To illustrate an order of magnitude, assume \$50 per foot for public improvements and \$16,000 per unit for rehabilitation. One mile of street with 90 units on each side would cost \$1,704,000. The City of Tracy estimates street construction and repair slightly higher because local soil constitution requires additional foundation preparation. The foregoing figures provide some insight into the financial magnitude of adequately housing the population of Escalon. As inflation continues, these costs will only increase. Such increases in the decade of the eighties, not matched by increased earnings, could have a significant and negative impact on meeting the additional housing need in Escalon.

A better understanding of the causes of the increase in construction costs is achieved when one examines the major component of the cost of meeting the housing need: land, labor, materials and capital-mortgage/investment, income. Because these are factors which affect each of these components, they will be examined separately.

Cost of Land

It is generally agreed that the cost of land is a less important factor in the increasing cost of housing throughout San Joaquin County than the cost of materials and labor.

Cost of Materials

Interviews with bankers, realtors, developers, and public officials, such as building inspectors and County Assessor's staff, confirm that the most significant element in the increase in the cost of housing is the cost of materials. Since lumber is the primary material in most types of residential construction, its price has a large impact on the value of the structure. In San Joaquin County, according to the Assessor's Office, the increase in cost of materials, particularly lumber, has resulted in increased market value of existing housing units.

Building codes in Escalon permit the use of plastic pipe which is less expensive to install because of the time it saves. Plastic pipe is impervious to acid and other components of the Valley soil and so pipes can be replaced less frequently.

Most people interviewed said that other building materials had increased in price but not as much as lumber. Whether building materials continue to increase in price so that they continue as a major cost factor in residential development in the future will depend, to some extent, on the supply and demand. Since all estimates indicate a high level of national housing starts every year in the foreseeable future, it seems likely that building materials will continue to increase in cost, but the rate of that increase is impossible to determine. It is safe to assume, however, that materials will continue to be a major, if not the major, cost in residential construction in the future.

Cost of Labor

Almost without exception, those interviewed about the cost of construction, cited the increasing cost of labor as the second most significant factor increasing cost of construction throughout San Joaquin County. Three factors have been frequently noted as contributors to the high cost of labor in the County: strong union control, shop control, and proximity to the Bay Area.

Most building trades in San Joaquin County are unionized. Unions obtain for their members substantial insurance and health benefits. Costs for these benefits are passed along in the hourly rates charged. On the other hand, certain levels of skill are generally required for union membership so unionization provides some control over quality of work done. In Stanislaus County labor is not as highly organized.

Much of the residential construction work in Escalon is done by contractors from Stanislaus County who employ non-union labor. As a result, it is generally agreed that construction costs are lower in Escalon than in parts of San Joaquin County further north.

Two of the major unions active in residential construction are plumbers and electricians. In San Joaquin County both of these unions are shop controlled. This means that the only way a plumber or electrician can be hired for a job is through a contractor. This automatically adds 10% overhead to two of the most costly types of labor required in residential construction. In San Joaquin County the other two key residential construction unions, painters and carpenters, are not shop controlled. Shop control varies from county to county depending upon the strength of the particular union in the area.

A third factor affecting the cost of labor in San Joaquin County is its proximity to the Bay Area labor market. Hourly wage rates in San Joaquin County are, in some cases, higher than in other Valley counties because of the proximity and competition with the Bay Area for some types of labor. When construction slows in San Joaquin County it is not unusual for union labor to commute to the East Bay for work. This happened in the early 1970's with such unions as the Operating Engineers. Unions have arrangements under which they notify their affiliates if there is a greater need for labor in their area than their local members can supply. As a result, the higher Bay Area wage rates are reflected in the standard rates in San Joaquin County.

Cost of Capital

There are two kinds of capital involved in providing housing: capital used by developers for initial site preparation and construction, and capital used by the home buyer. The availability and price of both types affect the cost of housing.

Development capital is short-term, borrowed at commercial rates, which tend to be considerably higher than mortgage rates. In the past, banks have been reluctant to make larger commercial loans to developers. However, more recently, banks have come to recognize that the great demand for housing makes these loans profitable. Now banks are actively seeking interim development loans. Interest rates, for commercial loans, are currently 11 1/4 to 11 3/4 percent. Mortgages are long term loans. Currently the rates on acceptable single family units for 30 years with 20% down run 11 1/4 to 11 3/4 percent. By comparison, in the mid 1970's mortgage money was going for about 9 percent. Frequently lenders also charge borrowers points or a given percent of the loan which covers the administrative costs and reflects the supply of mortgage money. Currently lenders are charging 1 to 1 1/4 points (1 to 1 1/4 percent of the total value of the loan).

What these interest rates do to the cost of housing is clearly indicated by the example of buying a \$40,000 house. At 9 percent for 30 years with a 20% down payment and one point, monthly principal and interest payments would be \$258. Under these same terms but at 11 1/4 percent, the monthly principal and interest payment would be \$312, or 21 percent more. Assuming an additional \$52 for taxes and homeowner insurance, total monthly house payments would range from \$310 to \$364. On the basis of a standard

eligibility formula used by lending institutions (i.e., monthly house payments -- principal and interest, taxes and insurance -- should not exceed 25% of gross monthly income), the buyer of the \$40,000 house at 9% would have to earn a minimum of \$14,900. At 11 1/2%, his annual income would have to increase to \$17,500. In both cases, the buyer would have to have \$8,000 for the down payment and another \$480 for points. Thus, as interest rates rise, many people are unable to find houses which meet eligibility criteria or don't have sufficient incomes to afford to buy a house.

Total Development Costs

Having discussed these components of housing cost, it is useful to determine the relative contribution of each in relation to total housing cost. Consider the development costs associated with an average three bedroom, single-family, owner-occupied unit* in the unincorporated area of San Joaquin County provided below:

TYPICAL 3 BEDROOM SINGLE FAMILY

OWNER OCCUPIED UNIT		<u>% of total cost</u>
Land Cost	\$6,000	9.3
Site Development	6,000	9.3
Construction	36,000	55.8
Marketing	1,200	1.9
Financing	4,500	7.0
Subtotal	53,700	83.3
Actual Sale Price	64,500	100.0

* A 1,200 sq. ft. house on a 6,000 sq. ft. lot with urban services (i.e., curbs, gutters, sidewalks, water, sewer, lighting) & with no government subsidy.

They may be considered roughly comparable to costs in the City of Escalon. It can be seen that construction and site development account for almost two thirds of total cost. Land cost accounts for less than ten percent of total cost.

The estimated per unit development cost of a typical 20 one-bedroom rental unit apartment structure in an urban area of the County with full urban services would be as follows:

TYPICAL 1-BEDROOM MULTI-FAMILY RENTAL UNIT

		<u>% of total cost</u>
Land Cost	\$1,200	4.3
Site Development	1,200	4.3
Construction	25,000	89.6
Financing	500	1.8
Total	27,900	100.0

Again, these figures may be considered roughly comparable to costs in Escalon.

The comparatively small number of multi-family apartments has resulted in reliance on single-family houses and duplexes for rental housing. Often these are older units, since monthly expenses (i.e., principal, interest, taxes, insurance, maintenance, etc) generally are less than on newer units and normally provide a positive cash flow or profit. On a new single family unit, an owner may even have to settle for a "negative" rent in order to attract renters and keep them, since a "break-even" rent may be prohibitive. His real return on his investment would be the value added to the property from inflation and

improvements and the reduction on his federal and state income taxes. The costs incurred in renting an average single family house in the County unincorporated area would be as follows. Again, they should be considered roughly comparable to costs in the City of Escalon.

		Monthly expenses (Sale price: \$64,
Loan amortization (80% of development costs @ 12% interest, 30 years).		\$ 530
Management costs		-
Vacancy and non-payment of rents		50
Reserve		25
Maintenance and other operating expenses (i.e., taxes and insurance)		75
Total monthly costs		680

New duplexes are most effective but still have difficulty producing a break-even rent or neutral cash flow. A typical (new) duplex with two bedrooms and one bath per unit would have monthly expenses as follows:

		Monthly expenses (development cost, \$27,900)
Loan Amortization (80% of development costs @ 12% interest, 30 years)		\$69.44
Management Costs		10.00
Vacancy and Non-payment of Rents		10.00
Reserve		10.00
Maintenance and other Operating Expenses		35.00
Total Monthly Costs		134.44

Approximate monthly rentals on different kinds of units in Escalon are as follows:

Single-family home (3-bdrm)	\$375-400
Duplex unit (2-bdrm)	250-300
Apartment unit (1-bdrm)	160-200

It appears that the need for rental housing in Escalon can be met much more cost-effectively by the construction of multi-unit apartment structures than by the conversion or construction of single-family houses or duplexes. It is also clear that smaller rental units (1 and 2 bedroom) to accommodate the growing numbers of childless young adult and senior citizen households can best be provided in multi-unit structures.

Governmental Constraints in Meeting Housing Needs

Efforts to provide affordable housing for all of the residents of a community may sometimes be frustrated by the action or regulation of government. Very often, these actions and regulations perform a valid function, but they may still work at cross purposes to housing goals. Escalon adopted a Growth Management Ordinance (No. 178) in April 1978. Its purpose was to control inadequately planned speculative residential development, and provide for orderly growth and environmental protection. One of the provisions (Sec 4.1) of this ordinance allows the issuance of not more than 75 building permits for single-family homes per year, with a maximum of 10 in any month. It also requires that the number of permits allowed for single-family homes be reduced if building or use permits are issued for multi-family structures or mobile home parks, at the rate of one single family home for each two multi-family units or

mobile homes.

Sec 4.3 of the same ordinance prohibits issuing building or use permits for multi-family units, mobile home parks, or two or more dwelling units on the same lot, without approval of the City Council.

This ordinance is likely to make the construction of publicly subsidized housing in Escalon more difficult. In order to be cost effective, a fairly large number of publicly subsidized units must usually be constructed at one time. A minimum of about 64 units per year must be constructed by the private sector to meet market-rate housing needs (Table XIX). Almost any viable program of publicly subsidized housing would interfere with the provision of adequate market-rate housing by restricting the number of single-family permits which could be issued. Approval of multi-unit publicly subsidized housing by the City Council would be certain to encounter considerable opposition for this reason. A possible solution to this problem would be to amend Ordinance No. 178 to allow the construction of publicly-subsidized housing without reducing the number of permits for single family dwellings which could be issued to the private sector.

The City's permit approval process adds directly to the cost of housing by the amounts charged for permits. The time required to complete the permit process amounts to an indirect cost for a developer.

To obtain a permit in Escalon, an applicant must appear in person or through a representative, a contractor, an agent, and

- a) identify and describe the work to be covered by the permit for which application is made.
- b) describe the land or lot on which the proposed work is to be done, by legal description, street address, or similar description that will readily identify and definitely locate the proposed building or work.
- c) be accompanied by plans, diagrams, computations and specifications and other data, as required by the building official.
- d) state the valuation of any new building or structure or any addition, remodeling or alteration to an existing building.
- e) be signed by permittee, or his authorized agent.
- f) Give such other data and information as may be required by the building official.

Building permit fees are as indicated in Building Permit Fees table, page 36 of the Uniform Building Code, 1979 Edition; valuation data is as published in the Building Standards magazine.

Mechanical permit fees are as indicated in Mechanical Permit Fees table, page 22 of the Uniform Mechanical Code, 1979 Edition.

Electrical permit fees are as indicated in the Electrical Permit Fees table, page 14, Pacific Coast Electrical Association, 1979 instrument for the local adoption by reference of the National Electrical Code.

Plumbing permit fees are as indicated in the Schedule of Fees table, page 4a of the Uniform Plumbing Code, 1979 Edition.

Water connection fees are as indicated in Sec 3 of City Council Resolution No. 286 of June 7, 1971.

Sewer connection fees are as indicated in Sec 3D of City of Escalon Ordinance No. 86 as amended by Ordinance No. 179 of June 19, 1978.

Park and Recreation fees are as indicated in Sec 2 of City Council Resolution No. 383 of July 7, 1975.

Strong Motion Instrumentation Program fees are as indicated in Fee Schedule table issued by the Division of Mines and Geology, Department of Conservation, Resources Agency, of the State of California.

Permit approval is usually granted within 24 hours and there is no time delay involved, unless applicant fails to furnish all the necessary information.

The Land Use Element of the Escalon General Plan to 1995 allows for a sufficient number of homesites at appropriate densities to accomodate probable future housing needs.

All residential areas within the Escalon City Limits are presently provided with water and sanitary sewers, and the City has a five-year capital improvement program for the provision of services. Parts of the water system are antiquated and in need of improvements, and the storm drainage system is inadequate in some areas. Plans are being formulated to correct the problems with both systems, however.

In Escalon, as elsewhere in California, the requirement of voter approval for public housing under state law poses a potential barrier to the provision of adequate non-market rate housing to meet the needs of lower income residents, and to fulfill the City's Fair Share obligations. Establishment of Article 34 Referendum Authority is a cumbersome and time-consuming process, and has often led to divisiveness and polarization in other communities.

THE HOUSING PROGRAM

Previous sections have highlighted the housing problem and have indicated the extent of housing need in Escalon. From these findings, it is obvious that public policy must be directed to meeting the housing need, particularly that for low and moderate income households.

The purpose of this section is to describe current efforts undertaken by the City to alleviate housing problems and to suggest possible actions which should be undertaken to supplement or complement present efforts. This information will be presented after 1) noting the City's overall housing goal and broad policy objectives, 2) citing the relevant housing program requirement of the state guidelines, and 3) listing applicable specific policy objectives.

Overall Housing Goal and Broad Policy Objectives

The overall housing goal of the City of Escalon is to "provide all residents with a choice of alternate living environments which are safe, healthy, pleasant and which include the desired level of cultural, educational, recreational and shopping facilities."

To accomplish this overall goal, the City has adopted a set of broad policy objectives which are consistent with state guidelines:

- . To assure the opportunity for residents of all income levels in Escalon to obtain safe, sanitary housing adequate to meet their needs.
- . To promote a sufficient variety of type, locations, and costs of housing.
- . To maintain and promote economically, physically, and socially viable residential neighborhoods.
- . To preserve viable agricultural land to the maximum extent possible in the development and expansion of residential areas.
- . To promote development of educational, recreational, and other necessary public facilities contributing to desirable residential areas.
- . To protect natural amenities from abuse, and destruction resulting from poor design and development of residential areas.

Preserving Housing and Neighborhoods

"The housing program of a local housing element shall describe the steps being taken to preserve existing housing and neighborhoods through such measures as rehabilitation, code adoption and enforcement, improvements in housing management and maintenance, and the provision of adequate municipal facilities and services, recognizing that housing preservation and conservation are high statewide priorities."

A. Specific Policy Objectives:

1. Programs will be instituted to provide for the conservation, rehabilitation, and renewal of deteriorating housing.
2. All possible means will be used to ensure that all existing residential areas are provided with basic services, including storm drainage, sanitary sewers, water supply, and solid waste disposal, and that all future residential developments will coincide with planned extensions of these basic services.

3. The neighborhood will be utilized as the basic planning unit in maintaining and extending residential areas.
4. Neighborhoods should be maintained through the use of a variety of methods including support of neighborhood improvement programs and conservation of existing housing whenever possible.
5. Intrusion of incompatible uses into residential areas will be prohibited, and adverse effects of adjacent uses will be minimized.
6. Major streets and highways should be planned and located so as not to break up neighborhoods.
7. Non-residential programs will be employed, wherever necessary, to facilitate the improvement of housing and neighborhood environment in blighted or potentially blighted areas.
8. The use of vacant urban parcels and reuse of deteriorating areas in existing urban centers should be encouraged.
9. Public facilities and improvements should be programmed not only to maintain viable residential areas but also to encourage the private maintenance of housing.

B. Existing Programs and Strategies

1. Housing Condition Survey

In August, 1980 the City of Escalon conducted a housing condition survey in cooperation with the San Joaquin County Planning Department and the San Joaquin County Council of Governments. Factors assessed by the survey included:

- a. Condition of streets.
- b. Presence and condition of curbs, gutters, and sidewalks.
- c. Condition of residential structures.
- d. Age of residential structures.
- e. Presence and condition of auxiliary structures.
- f. Condition of yards.

The survey covered all-residential structures in Escalon, and in unincorporated areas scheduled for annexation to the City. Survey findings are being used to assess the overall state of housing in Escalon, and to pinpoint structures and neighborhoods that are in need of improvement.

2. Provision of Urban Services

The City of Escalon has a five-year capital improvement program for the provision of urban services. All residential areas within the City limits are presently provided with water and sanitary sewers. The City is currently negotiating for the purchase of the Escalon Water and Light Company, which provides water for part of the City, in order to incorporate its system with the City's system and improve service. Plans are currently being formulated to upgrade and enlarge the entire water system.

The City also has a Master Plan for improvement of its storm drainage system, which is currently inadequate in several areas. This plan stipulates that builders of new subdivisions will be required to provide for storm drainage in adjacent areas of existing developments where it is deficient.

3. Inspection and Enforcement

The City of Escalon has a continuing program of inspection and code enforcement to abate structures which constitute hazards to health and safety and help prevent neighborhood deterioration.

4. Zoning Ordinance Review

The City of Escalon conducts a continuing program of zoning ordinance review and improvement to maintain adequate protection for residential

neighborhoods from intrusion of incompatible land uses.

C. Implementation Policies and Programs - Short Range (1-5 years)

1. The City will seek Community Development Block Grant funds for a housing rehabilitation program. Because of the scattered locations of substandard housing in Escalon, such a program should cover the entire City instead of being targeted on specific neighborhoods.
2. The City will continue its efforts to upgrade its water, sanitary sewer, and storm drain systems.
3. The City will continue its enforcement measures to abate substandard housing.
4. The City will continue its zoning ordinance review to maintain zoning in conformity with its General Plan and protect residential neighborhoods from incompatible land uses.

D. Implementation Policies and Programs - Long Range (5+ years)

1. The City should encourage lending organizations to engage in a joint venture to create a revolving loan fund for the rehabilitation of houses.
2. The City should encourage private lending institutions and banks to form pooled risk insurance plans to provide loans for meaningful rehabilitation treatment.
3. The City should encourage non-profit and limited dividend sponsoring groups who demonstrate the ability to provide expert management skills to undertake minimum and moderate size rehabilitation programs.
4. The City should encourage the establishment of a Countywide limited dividend Housing Development Corporation, composed of major businesses, residents and housing professionals that would issue shares to provide seed money to buy vacant land or deteriorating structures for the purpose of rehabilitating and selling them to low income families.
5. The City should stimulate voluntary code enforcement by providing guidance and technical assistance to residents who wish to make their own repairs, by encouraging the Agricultural Extension Service and community colleges to establish home repair clinics, and by encouraging the use of cable television and other media to provide consumers with information concerning housing care.
6. The City should address housing problems in a comprehensive manner, coordinating efforts directed at housing rehabilitation with the efforts of agencies and organizations concerned with other socio-economic problems.

Preserving Housing Affordability

"In areas where actions are aimed at conserving or expanding the supply of sound housing, the effect of such actions on housing affordability should also be evaluated

The housing program shall emphasize the importance of preserving affordability at the same time condition is being improved or maintained."

A. Specific Policy Objectives

- 1) Housing rehabilitation and neighborhood improvement programs should consider the economic ability of the residents to make the necessary improvements.
- 2) All possible means will be employed to avoid displacement of residents and elimination of neighborhoods; however, when necessary, relocation assistance will be provided to families and individuals who are displaced.
- 3) Renewal projects shall prevent the permanent displacement of residents and occupants of any project area by providing housing and places of business at a cost within the financial capabilities of the residents and occupants of the area.
- 4) New and innovative housing systems constructed on and off site which reduce costs without sacrificing quality should be promoted and utilized.
- 5) The City should further the efforts of private and non-profit individuals or organizations seeking to improve the income and housing conditions of residents.

Discussion: Because substandard housing in Escalon is scattered, neighborhood renewal programs which require the relocation of significant number of residents are unlikely to be necessary. Rehabilitation should be carried out throughout the City, and be directed to individual residential structures which are in need of repair or replacement.

It is very important that rehabilitation or replacement of residential units not result in their being made less affordable. A rehabilitation program which replaces low and moderate income housing with higher priced residences would be contrary to the goals and objectives of the Housing Element.

For this reason, any rehabilitation program should involve participation by current occupants to the maximum extent possible. In the case of rental units, rehabilitation aid to owners should be contingent on safeguards against rents being substantially raised after the units are improved.

B. Existing Programs and Strategies.

1. Housing Rehabilitation and Weatherization.

A non-profit organization, the Community Action Council, conducts a county-wide program of housing rehabilitation and weatherization for low income and elderly households. CETA financed crews perform health and safety related repairs and maintenance activities on all conservable units owned and occupied by low income homeowners.

(Conservable units are considered to be those which need maintenance but do not require extensive structural rehabilitation or replacement.) Materials for the repair of units owned and occupied by the elderly are paid for by funds from the Area Agency on Aging. Materials for repair of other low income housing are usually purchased at cost by the homeowner.

The insulation of units to reduce energy consumption in heating

and cooling is an important component of this program. Because there are no large concentrations of substandard housing in Escalon, no neighborhood targeted rehabilitation or weatherization programs have been instituted in the City. However, the County-wide CAC program services eligible households in Escalon on an individual basis.

2. Provision for Multi-Unit Structures.

The Land Use Element of the Escalon General Plan designates five areas of existing residential development adjacent to the City center as Medium Density Residential. This designation permits a density of 6 to 15 dwelling units per gross acre, indicating a population density of from 15 to 35 persons per gross acre. Presently, these areas are primarily occupied by single family homes and duplexes, but multi-unit structures can be accommodated through planned unit development.

Most of Escalon's residential areas are designated Low Density Residential on the General Plan. This designation permits a density of 2 to 6 units per gross acre. Low Density Residential areas are primarily intended for single family homes with an occasional duplex. Some multi-unit structures would be possible within planned unit developments.

C. Implementation Policies and Programs - Short Range (1-5 years).

1. The City will seek Community Development Block Grant funds to establish a comprehensive low interest rehabilitation loan program, in conjunction with a financial institution, to cover the entire City.
2. The City will investigate the use of other state and federal programs as sources of rehabilitation financing and will develop strategies for their application where appropriate.
3. Efforts will be made to provide for social and economic counseling services in conjunction with rehabilitation loan programs and code enforcement efforts.
4. Building standards will be reviewed to insure that they do not require used or rehabilitated structures to be brought up to unrealistically high standards.
5. The City will keep a close watch on applications for condominium conversions of multi-unit dwellings. If such conversions result in reduced housing affordability, the feasibility of a condominium control ordinance will be investigated.

D. Implementation Policies and Programs - Long Range (5+ years)

1. The City will support establishment of a publicly subsidized, non-profit, County-wide home maintenance corps.

Providing Standards and Plans for Adequate Sites

"The physical capacity of a local jurisdiction to address need is in part a function of the availability of adequate sites. Each locality must include in its Housing Element standards and plans for provision of adequate sites for housing.

Sites are adequate only to the extent they provide suitable locations which can collectively accommodate a range of housing (type, size and price) responsive to the needs of all economic segments of the community."

A. Specific Policy Objectives

1. New subdivisions will be required to provide for community systems and facilities for water sewers, and drainage.
2. Necessary expansion will be facilitated in a manner least disruptive to the agricultural surroundings and resources.
3. Growth will take place in areas within and adjacent to existing development, precluding random skip and ribbon developments.
4. New housing will be encouraged in areas of existing urban services.
5. Suitable recreational and community facilities will be encouraged.
6. The siting of low and moderate income housing should be encouraged in areas close to employment and transportation.
7. Public housing should be distributed in areas which are accessible to public transportation, shopping, and recreational opportunities.
8. The quality of residential design should enhance the aesthetic character of the City.
9. The street system shall be used to guide as well as accomodate land use and development within the City.
10. Streets in residential developments should provide for maximum separation of pedestrian and vehicular traffic, be functionally designed, and exhibit adequate safety standards.
11. Public transit service requirements shall be considered in street planning, design, construction, and improvement.

B. Existing Policies and Programs.

1. Control of Annexation

The Escalon Growth Management Ordinance (No. 178) restricts the number of subdivision lots outside the existing City Limits which can be approved for annexation to 150, less the number of undeveloped lots within the City Limits and in already approved subdivisions outside the City Limits. The purpose of this requirement is to minimize "leapfrog" development and encourage infill-of undeveloped lots within the City Limits.

2. Provision of Services to New Subdivisions.

The City currently requires developers to provide for water, sewers, and drainage in all new subdivisions. Builders are also required to provide storm drainage facilities for previously developed areas adjacent to new subdivisions, if it is deficient in those areas.

C. Implementation Policies and Programs

1. The City will continue to enforce annexation control regulations intended to minimize "leapfrog" development and encourage development of vacant areas within the existing City limits.
2. The City will continue to require builders of new subdivisions to provide for urban services.

Reducing the Effects of Housing Discrimination

"The locality should, through its housing program, seek to reduce the

effects of discrimination in housing based on race, color, religion, sex, family size, marital status, national origin, ancestry or other arbitrary factors and to provide safeguards against future discrimination in housing."

A. Specific Policy Objectives.

- 1) The City should remove any form of discrimination or segregation in housing.
- 2) The City should promote all public and private efforts to assure a full range of choice in the purchase and rental of housing.

B. Existing Programs and Strategies.

As a recipient of federal funds for a number of programs, the City has given assurances that it will comply with:

1. Title VI of the Civil Rights Act of 1964 (Public Law 88-352, and the regulations issued pursuant thereto (24 CFR Part 1), which provides that no person in the United States shall on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the applicant receives Federal financial assistance and will immediately take any measures necessary to effectuate this assurance. If any real property or structure thereon is provided or improved with the aid of Federal financial assistance extended to the applicant, this assurance shall obligate the applicant, or in the case of any transfer of such property, any transferee, for the period during which the real property or structure is used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits.
2. Title VIII of the Civil Rights Act of 1968 (Public Law 90-284), as amended, administering all programs and activities relating to housing and community development in a manner to affirmatively further fair housing and will take action to affirmatively further fair housing in the sale or rental of housing, the financing of housing, and the provision of brokerage services.
3. Section 109 of the Housing and Community Development Act of 1974, and the regulations issued pursuant thereto (24 CFR Part 570.60), which provides that no person in the United States shall, on the grounds of race, color, national origin, or sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under, any program or activity funded in whole or in part with funds provided under this Part.
4. Executive Order 11063 on equal opportunity in housing and non-discrimination in the sale or rental of housing built with Federal assistance.
5. Executive Order 11246, and the regulations issued pursuant thereto (24 CFR Part 130 and 41 CFR Chapter 60), and Section 4(b) of the Grant Agreement, which provides that no person shall be discriminated against on the basis of race, color, religion, sex or national origin

in all phases of employment during the performance of Federal or federally assisted construction contracts. Contractors and subcontractors on Federal and federally assisted construction contracts shall take affirmative action to insure fair treatment in employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation and selection for training and apprenticeship.

C. Implementation Policies/Programs

1. The City will continue its support of programs that could expand housing opportunities for minorities and lower-income residents.
2. The City will support responsible voluntary groups conducting education and monitoring programs to combat housing discrimination.
3. The City will insist that banks and insurance companies with whom they do business adopt affirmative action lending insurance programs.
4. The City will support legislation which extends antiredlining regulations to State chartered banks and should examine the need to extend anti-redlining regulations to mortgage life insurers, credit unions, and private finance companies.

DISCUSSION: The detrimental effects of housing discrimination based on race, color, religion, sex, family size, marital status, neighborhood and other arbitrary factors are widely known and need not be recounted. If the public interest is to be advanced, government must be in the forefront to improve housing accessibility.

At the state level, a major constraint in providing housing for low and moderate income families is Article 34 of the State Constitution which requires voter approval for public housing projects. This effectively prohibits public housing authorities from utilizing the funding programs of Federal agencies, notably HUD and the Farmers Home Administration, without the consent of the electorate. Repeal of Article 34 would greatly increase the capacity of the Housing Authority to meet local housing needs.

Redlining is another aspect of discrimination which could be addressed by the City. Recent federal and state legislation require lending institutions (i.e., State chartered savings and loan associations and federally chartered lending institutions) to disclose lending patterns by census tract. The City can combat redlining by refusing to deposit funds in financial institutions which are found upon data analysis to discriminate in lending. The City could require such lending institutions to adopt affirmative action lending and insurance programs. Among other things, an affirmative action program implies review and revision of lending and insuring practices in supposed high risk areas. As an example, lending institutions could be required to make loans in selected areas proportionate to the deposits which are made by residents of the area. Such "reinvestment" as opposed to "disinvestment" could help prevent the deterioration of basically sound neighborhoods.

The City should also support any legislation to extend anti-redlining regulations to State chartered banks and examine the need to extend such regulations to other financial institutions engaging in residential financing. Regulations similar to the recent regulation governing the lending practices of State chartered savings and loans should be developed for banks. While savings and loans engage in the bulk of residential financing, banks also participate in residential

financing as well as providing a major source of commercial and industrial investment capital which is also often difficult to obtain in older areas even if individual or organizational credit standing is good.

Providing Housing Variety and Choice

"Adequate provision for the housing needs of all economic segments of the community requires each locality, through its housing element, to make a good faith, diligent effort to provide opportunities for and to facilitate the maintenance, improvement and development of an appropriate variety and choice of housing for all economic segments of the community consistent with its identified need and fair share responsibilities. . . . Such effort, however, must emphasize the use of those public powers which impact on housing, including, but not limited to land use controls, development controls, and regulatory concessions and incentives. Such effort must also include a commitment to pursue and cooperate in available federal and state housing programs or indicate the manner in which the locality intends to address its housing needs without such assistance."

A. Specific Policy Objectives

- 1) The provision of a wide variety of housing types, and the use of new and more efficient residential design concepts, such as dwelling clusters and planned unit developments, will be encouraged.
- 2) Opportunity for home ownership in all types of housing should be encouraged.
- 3) Establishment of an area containing all City utilities and improvements will be encouraged. Area will be made up of reduced-size lots for sale, to be used to locate mobilehomes.

B. Existing Programs and Strategies

1. Assisted Units Provided

The City of Escalon presently has one publicly subsidized housing program, the Willo Heights Apartments. This 33 unit operation was financed by a \$438,000 loan made under the Farmers Home Section 515 Rural Rental Housing Program, and is operated by Mr. Lloyd Diedo. The program is currently in operation and all units are filled.

C. Implementation Policies and Programs - Short Range (1-5 years)

1. The City will continue to support public and private efforts to provide housing assistance to low and moderate income families, in order to meet Fair Share Housing Goals.
2. The City will assess the housing needs of special groups - the elderly, handicapped, households headed by women, farmworkers, and minorities and pursue the implementation of federal and state programs to meet these needs.
3. The City will seek federal funds to construct an approximately 50 unit publicly assisted senior citizen housing complex.
4. The City will investigate the feasibility of a mandatory inclusionary zoning ordinance which would require new housing developments to include a minimum number of units for sale or

rent to low and moderate income persons. Density bonuses (reducing the land cost per unit), Section 8 subsidies, and other such devices might be used to reduce the ordinance's financial impact.

5. The City will consider amending its ordinances to include the use of new housing technologies, including solar and other energy saving techniques, manufactured housing, and modular housing, in order to expand housing variety and choice and to reduce the costs of housing construction and operation.
6. The City will assess its General Plan to insure that older residential neighborhoods capable of conservation or rehabilitation are not deterred from the goal of neighborhood improvement by the use of premature commercial or industrial designations.

D. Implementation Policies and Programs - Long Range (5+ years)

1. The City should support development of a Countywide Land Bank system which will buy, hold, and resell land in areas where conflicting land uses have retarded residential expansion; in areas where assisted housing is needed; and in expansion areas where land appreciates in value because of public actions.

Discussion: In order to provide adequately for the housing needs of low and moderate income families, the City must promote programs which increase the supply of standard housing for this segment of the community at rents and housing payment levels which they can afford. Generally, this means County support for federal or state subsidized housing programs. Among the more relevant ones are the following: 1) Section 8 Low Income Rental Assistance Program, 2) Revised Section 235 Homeownership Assistance Program, 3) Section 202 Program --direct loans for housing the elderly or the handicapped, 4) Section 213 Cooperative Housing Program, 5) FmHA Section 502 Homeownership Assistance Program for Low and Moderate Income Families, 6) FmHA Section 523 and 524 Loan Programs, 7) FmHA Section 523 Technical Assistance Program, 8) FmHA Section 514/516 Farm Labor Housing Loans and Grants, 9) SB 99 Housing Assistance Program, 10) California Housing Finance Authority Housing Assistance Programs.

Providing Citizen Participation in Housing Programs

"The housing element shall be developed through a decision-making process which is accessible to and directly involves all economic segments of the community. Effective public involvement requires that citizens be kept informed as the housing element is developed and be provided opportunities to review and comment on the element as it is being prepared."

A. Specific Policy Objectives

- 1) In its housing activities the City should promote citizen participation and involvement from all groups and income levels.
- 2) Residents and businesses of renewal project areas should be encouraged to participate within their capabilities in the economic development and the decision-making process of their respective project.

B. Existing Programs and Strategies

The City of Escalon has formed a Citizens' Advisory Committee on

Housing to aid in the development of programs to meet the housing needs of the City's residents.

C. Implementation Policies and Programs

1. The City will continue to promote citizen participation in all housing related programs. A special effort will be made to involve low and moderate income, elderly, handicapped and minority people.

Environmental Impact Report

Introduction

The purpose of this report is to specify the possible impacts of the Draft Housing Program (DHP) and to detail how these impacts can be mitigated. The types of impacts discussed include social, economic, and institutional relationships as well as those of a biophysical nature. The DHP is not limited to a single event or a short time span. It is a set of actions to be implemented selectively over a long period of time, wherever specific conditions warrant. For these reasons a more precise determination--of adverse impacts and mitigation measures--will be made in future project EIRs.

This report consists of four major sections:

- I description of the project
- II environmental setting
- III environmental impacts
- IV sources consulted

In order to avoid duplication of background information that is already recorded, the information in Sections I and II is included by reference to the Land Use and Circulation Element, adopted in January, 1978; the Conservation and Open Space Element, adopted in January, 1974; and the Seismic Safety and Safety Element, adopted in December, 1975; of the Escalon General Plan. Copies available at Escalon City Hall, 1855 Coley Avenue, Escalon, CA 95320.

I. Description of Project

- A. Purpose - The purpose of the DHP is to identify, in brief, the fundamental housing problems of the City of Escalon; to establish a framework of general housing policies; to define operational objectives; and to recommend the possible actions which should be evaluated by government for selective implementation.
- B. Location - Escalon, San Joaquin County, California (See Ch. II, Sec. A, Land Use/Circulation Element).

II. Environmental Setting

A. Biophysical Setting

1. Topography - Ch. II, Sec. B, Land Use and Circulation Element
2. Climate - Ch. II, Sec. B, Land Use and Circulation Element
3. Seismicity - Seismic Safety and Safety Element
4. Natural Resources - Ch. II, Sec. B, Conservation and Open Space Element.
5. Vegetation and Wildlife - Ch. II, Sec. B, Cons. and Open Space Element.
6. Air Quality - Ch. II, Sec C, Conservation and Open Space Element.
7. Hydrology - Ch. II, Sec. B, Conservation and Open Space Element.

B. Social Setting

1. Historical - Ch. II, Sec. A, Land Use and Circulation Element.

2. Existing Land Use and Circulation Patterns - Ch. II, Sec. A, Land Use and Circulation Element.
3. Housing - Ch. II, Sec. C, Land Use and Circulation Element.
4. Economy - Ch. II, Sec. C, Land Use and Circulation Element.
5. Public Facilities and Services - Ch. II, Sec. C, Land Use and Circulation Element.

C. Existing Plans and Policies (See Draft Housing Program).

III. Environmental Impacts

A. Preserving Housing and Neighborhoods through:

1. Use of Community Development Block Grant funds for a housing rehabilitation program.
 - a. Impact - higher governmental costs.
Mitigation - legitimate public expenditures.
 - b. Impact - higher housing prices resulting from housing upgrading.
Mitigation - provide for low-interest homeownership loans from both public and private sources; provide for construction of new low and moderate income housing.
2. Continue efforts to upgrade water, sanitary sewer, and storm drainage systems.
 - a. Impact - stimulation of increased development and population growth.
Mitigation - use growth control, subdivision, and zoning ordinances to forestall undesirable growth.
 - b. Impact - possible adverse impact on natural amenities of specific facility construction.
Mitigation - develop measures for protection of natural amenities in connection with plans for specific facilities.
 - c. Impact - cost of facilities improvements leading to higher property taxes.
Mitigation - seek federal and state grants for facilities improvements; support legislation providing negative tax benefits for renters.
3. Continue enforcement measures to abate substandard housing.
 - a. Impact - displacement of lower income residents.
Mitigation - support provision of low interest loans for rehabilitation and reconstruction; provide for new low and middle income housing.
 - b. Impact - parcels left underdeveloped by abatement actions.
Mitigation - abatement program may catalyze development by removal of substandard structures; support provision of low interest loans for reconstruction.
4. Maintain zoning ordinance review to maintain zoning in conformity with General Plan and protect residential neighborhoods.
No adverse impact.

B. Preserving Housing Affordability by:

1. Seek Community Block Grant funds to establish comprehensive low interest rehabilitation loan program.
No adverse impacts.
2. Use of other state and federal programs as sources for rehabilitation financing.
No adverse impact.

3. Provide for social and economic counseling in conjunction with rehabilitation and code enforcement.
No adverse impact.
4. Review building standards to insure they do not require unreasonably high standards for rehabilitated structures.
a. Impact - lower housing standards.
Mitigation - do not apply code to new housing construction, or to improvements of a health or safety nature.
5. Maintain watch on condominium conversions.
No adverse impact.

C. Standards and Plans for Adequate Sites.

1. Continue to enforce subdivision control regulations.
a. Impact - insufficient number of building sites.
Mitigation - allow for creation of a sufficient number of new sites to augment those available in infill areas.
2. Continue to require provision of urban services by builders of new subdivisions.
a. Impact - higher housing costs.
Mitigation - availability of services increases property values; support provisions of low and moderate income housing.

D. Reducing the Effect of Housing Discrimination.

1. Continue support of programs to expand minority and low income housing opportunities.
No adverse impact.
2. Support responsible voluntary groups combatting discrimination.
No adverse impact.
3. Insist that banks and insurance companies adopt affirmative action lending insurance programs.
No adverse impact.
4. Support anti-redlining legislation.
No adverse impact.

E. Providing Housing Variety and Choice.

1. Support public and private efforts to provide housing assistance to low and moderate income families.
a. Impact - increased governmental costs.
Mitigation - legitimate public expenditure.
2. Assess the housing needs of special groups.
a. Impact - increased governmental costs.
Mitigation - legitimate public expenditure.
3. Seek federal funds for development of a senior citizens' housing development.
a. Impact - increased governmental costs.
Mitigation - legitimate public expenditure.
4. Investigate feasibility of a mandatory inclusionary zoning ordinance requiring new developments to include low and moderate income units.
No adverse impact.

5. Ordinance amendment to allow new housing technologies.
No adverse impact.
6. Assess General Plan to insure that viable residential neighborhoods are not zoned commercial or industrial.
 - a. Impact - lack of commercial and industrial sites.
Mitigation - assess actual need for commercial and industrial sites.

F. Providing Citizen Participation in Housing Programs.

1. Promote citizen participation in all housing related programs.
No adverse impact.

Unavoidable Environmental Impacts

These impacts include loss of open space and agricultural land, degradation of air quality, and additional energy consumption.

Program Alternatives

- A. No Program - This alternative limits coverage of the Housing Program to existing levels. While retention of the status quo would produce less severe impacts than those already discussed with respect to extension of the Program, the present breadth of coverage is insufficient to satisfy the documented housing needs of Escalon residents.
- B. Greater reliance on the private sector - This alternative involves City support of legislation designed to induce private investment by allowing tax breaks (credits or deductions) to developers of housing for low to moderate income families. Such legislation would amount to supplementing current participation in the housing program by a method that could conceivably accomplish greater housing coverage without expenditure of public funds.

The Relationship between Short-Term and Long-Term Productivity

The housing program appears to conform to the long-range goals and short-range objectives of the City of Escalon as expressed in its General Plan.

Irreversible Changes

To the extent that the Housing Program is enacted, irreversible changes will occur in the land use and circulation patterns.

Growth Inducing Impact

As neighborhood revitalization programs attract commercial and industrial development they will create growth inducing impacts in the areas of job supply and housing demand. Rezoning will affect growth in at least two areas. In combination with an adequate provision of support systems, rezoning to higher residential densities will spur population increases in both renewed neighborhoods and new subdivisions.

Energy Consumption

The mitigation measures related to energy consumption have been cited above. Briefly, they involve: 1) rezoning to higher densities to improve per unit efficiency and to provide adequate support of the public transportation

systems, and 2) placement of new subdivisions near employment and commercial centers.

IV. Sources Consulted

Organizations:

Federal: Department of Housing and Urban Development
Farmers Home Administration

State: Office of Planning and Research.

Regional: San Joaquin County Council of Governments.

County: Department of Public Works
Local Health District

City: Building Department

Materials:

San Joaquin County: Land Use/Circulation Element to 1995
Housing Element to 1995

San Joaquin County Council of Governments: Housing Element, Phase II

City of Escalon: Conservation and Open Space Element.
Land Use and Circulation Element.
Seismic Safety and Safety Element.
General Plan to 1995

TABLE I

SEPTEMBER PEAK EMPLOYMENT PROJECTIONS FOR ESCALON (EXCLUDING AGRICULTURE)

	1970		1995	
	No.	%	No.	%
Food processing	400	40.65	695	36.39
Other manufacturing	17	1.73	260	13.61
Construction	129	13.11	185	9.69
Trucking & warehousing	29	2.95	85	4.45
Other transportation and utilities	5	.05	20	1.04
Wholesale trade	9	.09	55	2.88
Retail trade	109	11.08	185	9.69
Finance	25	2.54	30	1.57
Insurance and real estate	7	.07	10	.05
Entertainment & recreation	0	.00	25	1.31
Medical and health	74	7.52	125	6.54
Government	153	15.55	160	8.38
Other services	27	2.74	75	3.93
Total	984	100.00	1910	100.00

% = percent of total City nonagricultural work force.

Source: San Joaquin County Planning Department.

TABLE II

CITY OF ESCALON POPULATION 1960, 1970, 1975, AND PRELIMINARY 1980 CENSUSES

POPULATION

<u>Census</u>	<u>Number</u>	<u>% of County Population</u>
1960	1,763	0.7
1970	2,366	0.8
1975	2,524	0.8
1980	3,042	0.9

ANNUAL RATE OF INCREASE

<u>Period</u>	<u>City of Escalon Annual Rate</u>	<u>San Joaquin County Annual Rate</u>
1960-70	3 percent	1.6 percent
1970-75	1	0.7
1975-80	4	2.5

Source: 1960, 1970, 1975, and Preliminary 1980 U. S. Censuses

TABLE III

Escalon Planning Area Racial Composition 1960, 1970, 1975

		1960	1970	1975
White	Number	5901	6836	7257
	% of Total Pop.	99.6	97.9	99.6
Black	Number	5	3	0
	% of Total Pop.	.008	.004	0
Other	Number	20	147	29
	% of Total Pop.	.3	2.1	.4
Spanish Surname	Number	573	1068	NA
	% of Total Pop.	9.7	15.3	NA

Source: San Joaquin County Planning Department

TABLE IV

Age Characteristics 1960 - 1970 - 1975 City of Escalon and Escalon Planning Area

	0-4		5-9		10-14		15-19		20-29		30-39		40-49		50-59		60-64		65+	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
City of Escalon 1960	169	9.6	181	10.3	182	10.3	110	6.2	212	12.0	208	11.8	206	11.7	176	10.0	78	4.4	240	13.6
1970	188	7.9	245	10.4	254	10.7	249	10.6	293	12.4	247	10.4	292	12.3	263	11.1	108	4.6	228	9.6
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Change 1960-70	+19	-1.7	+64	+1.1	+72	+1.4	+139	+4.3	+81	+1.4	+39	-2.4	+86	+1.6	+87	+1.1	+30	+1.2	-12	-1.4
Escalon 1960	583	9.8	628	10.6	648	10.9	527	8.9	593	10.0	732	12.4	783	13.2	615	10.4	255	4.3	562	9.5
Planning Area 1970	554	7.9	724	10.4	750	10.7	734	10.5	865	12.4	730	10.4	862	12.3	776	11.1	318	4.6	673	9.6
1975	520	7.1	593	8.1	785	10.8	759	10.4	978	13.4	863	11.8	838	11.5	811	11.1	347	4.8	792	10.9
Change 1960 - 70	-29	-1.9	+96	+1.5	+137	+2.1	+232	+3.6	+385	+5.4	+131	-1.0	+55	-1.7	+236	+3.8	+92	+1.4	+230	+3.4
Change 1970 - 75	-34	-1.0	-131	-1.8	+35	+0.5	+25	+0.3	+113	+1.3	+133	+1.8	-24	-0.3	+35	+0.5	+29	+0.4	+119	+1.6
Change 1960 - 75	-63	-2.7	-35	-2.5	+137	+2.1	+232	+3.6	+385	+5.4	+131	-1.0	+55	-1.7	+236	+3.8	+92	+1.4	+230	+3.4

Source: San Joaquin County Planning Department

TABLE V

Marital Status of City of Escalon Residents Over 14 by Sex 1960 and 1970

Census	Single				Married				Divorced, Widowed, Separated				Total			
	Male		Female		Male		Female		Male		Female		Male		Female	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1960	134	22	83	13	442	71	446	68	45	7	128	19	621	100	657	100
1970	195	26	148	19	508	67	501	66	53	7	110	14	756	100	759	100
*% Total Males																
**% Total Females																

TABLE VI

Marital Status of All City of Escalon Residents Over 14 1960 and 1970

Census	Single		Married		Divorced, Widowed, Separated		Total	
	No.	%	No.	%	No.	%	No.	%
1960	217	17	888	69	173	14	1278	100
1970	343	23	1009	67	163	11	1515	100
*% all residents								

Source: 1960, 1970, and 1975 Census, U.S. Bureau of the Census

TABLE VII

City of Escalon Family Composition 1960-1970

Census	Persons Living Alone		Husband-Wife		One-Parent *		Female Head		Male Head		Total	
	Number	%**	Number	%**	Number	%**	Number	%**	Number	%**	Number	%**
1960	83	14	472	79	40	7	NA	NA	NA	NA	595	100
1970	129	16	627	76	71	9	50	6	21	3	827	100

* Includes families with female and male heads

** Percent of total families

Source: 1960, 1970, and 1975 Censuses, U. S. Bureau of the Census

TABLE VIII

HOUSING UNITS AND HOUSEHOLDS 1960, 1970, 1975 and Preliminary 1980											
Census	Group Quarter Pop.	Household Pop.	Total Housing Units	Household (Occupied Units)	Vacant Units	Vacancy Rate, %	Pop. per Household	% County Household Units	% County Households	San Joaquin County Pop. per Household	County Vacancy Rate
1960	18	1,745	626	595	31	5.0	2.93	0.7	0.8	3.15	7.5
1970	8	2,358	867	842	25	2.9	2.80	0.9	0.9	3.02	4.3
1975	0	2,524	966	934	32	3.3	2.70	0.9	0.9	2.76	5.3
1980	0	3,042	1,233	1,188	95	7.4	2.56	1.0	1.0	2.65	7.9

ANNUAL PERCENTAGE RATE OF INCREASE				
Period	City of Escalon		San Joaquin County	
	Housing Units	Households (Occupied Units)	Housing Units	Households
1960-70	3.8 %	4.2 %	2.0 %	2.4 %
1970-75	2.3	2.2	2.9	2.7
1975-80	6.7	5.4	4.4	3.7

Source: 1960, 1970, 1975, and Preliminary 1980 U. S. Censuses, U. S. Bureau of the Census

TABLE IX

MEDIAN FAMILY * INCOME 1960 and 1970

Census	Median Escalon Family Income	Median County Family Income	Escalon Families with less than 80% County Median		Escalon Families with less than 80% County Median		San Joaquin Co. Families with less than: 80% Co. Median 50% Co. Median	
1960	\$ 5,106	\$ 5,889	229 **	45 %	110 **	21 %	36 %	19 %
1970	8,239	9,602	294	45	141	21	36	20

* Excludes persons living alone

** Number of families

Source: 1960, 1970, and 1975 Censuses, U. S. Bureau of the Census.

Population Below Poverty Level - 1970Families Below Poverty Level

Category	City of Escalon		San Joaquin County
	No. *	% **	% **
All families	49	7	11
Female Head/House	11	22	40
Over 65 Head/House	10	NA	NA
Black Head/House	0	0.0	NA
Spanish Surname	16	NA	NA

Households Below Poverty Level

Category	City of Escalon		San Joaquin County
	No. *	% **	% **
All Households	52	6	14
Homeowner Households	28	5	9
Rentor Households	24	9	22

* Number in Category below poverty level

** Percent of Total number in category below poverty level.

Source: 1960, 1970, 1975 Census
U.S. Bureau of the Census

TABLE XI

SINGLE FAMILY HOMES SOLD 1975 - 1979

Year	Escalon Planning Area			San Joaquin County	
	Number	Percent*	Average Sales Price	Percent*	Average Sales Price
1975	58	4.6	\$ 23,500	5.2	\$ 28,250
1976	47	3.6	31,600	6.1	31,650
1977	97	7.2	37,250	10.0	38,350
1978	133	NA	35,665	NA	46,158
1979	118	NA	51,065	NA	52,504

* Percent of total single family homes sold

...
 RATE OF CHANGE IN AVERAGE SALE PRICE OF
 SINGLE FAMILY HOMES 1975 - 1979

Period	Percent Change in Escalon Planning Area	Percent Change in San Joaquin County
1975-1976	+ 34	+ 12
1976-1977	+ 18	+ 21
1977-1978	- 4	+ 20
1978-1979	+ 43	+ 14
1975-1979	+117	+ 86
Ave. Annual Change, 1975-79	+ 25	+ 17

Source: San Joaquin County Planning Department

Gross Rent As A Percentage of Income - 1970 Census

Escalon Planning Area

Annual Household Income	Total # Renters	# Renters Paying Over 25% of Gross Income	% Renters Paying Over 25% of Gross Income	San Joaquin County % Renters Paying Over 25% of Gross Income
Less than \$5,000	152	130	85.5	82.2
\$5,000 -10,000	159	12	7.5	19.0
Over \$10,000	84	0	0.0	1.3
All Renters Reporting Income	395	142	35.9	44.3
Renters Not Reporting Income	72	NA	NA	NA

Source: 1970 and 1975 Census - U.S. Bureau of the Census

City of Escalon Owner/Rental Units 1960 - 1970

Census	Owner Occupied		Renter Occupied		San Joaquin County	
	No.	%	No.	%	% Owner	% Renter
1960	412	69	183	31	63.6	36.4
1970	567	67	275	33	61.4	38.6

Source: 1960, 1970, and 1975 Census - U.S. Bureau of the Census

TABLE XIV

Housing Type 1960 - 1970 - 1979

City of Escalon

Year	Single Family Units			Multi-Family Units	
	Total	No. Owner Occupied	% Owner Occupied	Total	% of Total
1960	611	412	67	15	2
1970	767	493	64	100	12
1979	831	NA	NA	314	27

TABLE XV

City of Escalon
Condition of Residential Structures 1980

	No.	%
Total Residential Structures	1117	100
Structures in New Condition	317	28
Sound Structures Needing Maintenance	311	27
Structures with Minor Repairable Structural Deficiencies	399	36
Structures with Major Repairable Structural Deficiencies	72	6
Structures In Need of Replacement	18	2

TABLE XVI

City of Escalon Age of
Residential Structures 1980

	No.	%
Total Residential Structures	1117	100
Structures Less Than 10 Years Old	315	28
Structures 10-25 Years Old	346	31
Structures More Than 25 Years Old	456	41

City of Escalon Age of Residential
Structures 1960 and 1970

	1960		1970	
	No.	%	No.	%
Total Residential Structures	626	100	867	100
Structures Less Than 10 Years Old	183	29	283	33
Structures 10-20 Years Old	137	22	182	21
Structures More Than 20 Years Old	306	49	402	46
Structures More Than 30 Years Old	NA	NA	277	32

Source: San Joaquin County Planning Department

TABLE XVII

Overcrowded Households 1960 - 1970

Census	CITY OF ESCALON				SAN JOAQUIN COUNTY			
	Total Household No.	Overcrowded No.	%	Severely Overcrowded No. %	Overcrowded %	Severely Overcrowded %	Severely Overcrowded %	Severely Overcrowded %
1960	595	58	10	NA	NA	11.8	NA	NA
1970	842	51	6	14	2	9.6	2.8	2.8

① 1.01 or more persons per room

② 1.51 or more persons per room

TABLE XVIII

Length of Occupancy 1960 - 1970

Census	CITY OF ESCALON						SAN JOAQUIN COUNTY					
	Total Households	0-1.9 Yrs.		2-5.9 Yrs.		6 + Yrs.	0-1.9 Yrs.		2-5.9 Yrs.		6 + Yrs.	
		No.	%	No.	%	No. %		%		%		%
1960	595	203	34	129	22	263 44	37		25		39	
1970	842	253	30	173	21	416 49	35		19		46	

Source: 1960, 1970, and 1975 Census - U.S. Bureau of the Census

TABLE XIX

CITY OF ESCALON - PROJECTED NEED FOR MARKET RATE HOUSING - 1980 to 1985

	<u>New dwelling Units Needed</u>
Basic New Construction	119
Replacement Needed	27
Total Need	146
Annual Need	29

Source: San Joaquin County Planning Department

TABLE XIX-A

CITY OF ESCALON - HOUSEHOLDS IN IMMEDIATE NEED OF HOUSING ASSISTANCE

<u>Affordability</u>	<u>Number of households</u>
Owner	52
Renter	107
<u>Overcrowding</u>	108
<u>Substandard Units</u>	213
<u>Special Needs</u>	
Elderly/Handicapped	21
Large Families	34
Minority	96

TABLE XX

Residential Building Permits

City of Escalon 1976 - 1979

Year	Total Units	Single Family Home	Duplex Units	Apartment Units
1976	23	23	-	-
1977	16	15	-	1
1978	60	58	2	-
1979	119	75	-	44
Total	218	171	2	45
Yearly Average	55	43	.5	11

Source: City of Escalon Building Department

CITY OF ESCALON
GENERAL PLAN
SCENIC HIGHWAY ELEMENT

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Bibliography

Planning Commission Resolution No. 75-1

City Council Resolution No. 388

SCENIC HIGHWAY ELEMENT OF THE ESCALON GENERAL PLAN

I

INTRODUCTION

A. General

The Scenic Highway Element is designed to serve as a guide for the establishment of local scenic routes. Further, it seeks to guide the preservation and enhancement of scenic qualities and natural scenic areas adjacent to and visible from scenic routes.

The Scenic Highway Element relates directly to the open space and the circulation element and indirectly to the land use element. It clarifies and supplements the policies and maps adopted in the Escalon General Plan. This element will also be used to review and update all elements in the General Plan to keep the document internally consistent.

B. Legislative History

The concern of the public in California for the protection of environmental quality has reached unprecedented heights in the past few years. Requirements for conservation and open space elements of the General Plan and strict requirements for the evaluation of environmental impacts through the provisions of the 1970 California Environmental Quality Act serve as examples. Predating these efforts, however, is the California Master Plan for Scenic Highways which grew out of a movement to reassess the need for construction of a freeway along the rugged California coastline. Senate Concurrent Resolution (SCR) No. 26 in 1960 authorized a prototype scenic roads study, destined to preserve the natural beauty of State Route 1. In the following year the Legislature authorized further investigation of the Scenic Highway concept. Pursuant to SCR 4 in 1962, a Citizens Advisory Committee, assisted by an Interdepartmental Committee on Scenic Highways, prepared a preliminary plan for scenic routes. Both Committees were continued in existence to further address specific technical questions and to refine and develop a final report. This report, entitled A Plan for Scenic Highways in California, was submitted to the Legislature in March of 1963. Its conclusions and recommendations became the basis of legislation commonly referred to as the Scenic Highway Law. The law established a statewide Scenic Highway Program "... as an important part of the all encompassing effort which the State must take to protect and enhance California's beauty, amenity and quality of life". This program included a master plan illustrating the State routes eligible for designation as scenic highways and authorized the creation and application of scenic highway standards.

Adoption of the Scenic Highway Law set forth California's interest in scenic highway conservation and recognized the necessity of a cooperative effort by State and local governments in the designation and protection of scenic corridors.

In response to increasing concern for the preservation of scenic, historical and recreational resources and, perhaps also, to restimulate flagging interest in scenic highways, the Legislature in 1969 mandated a Scenic Highways Element in all General Plans.

The specific authority for preparation of the scenic highways element is California Government Code Section 65302(h) which states that the general plan shall include:

"As scenic highway element for the development, establishment, and protection of scenic highways pursuant to the provisions of Article 2.5 (commencing with Section 260) of Chapter 2 of Division 1 of the Streets and Highways Code."

C. Preparation History

Preparation of this Element is in conjunction with the one being prepared by the San Joaquin County Council of Governments. Those portions applicable to the Escalon area have been extracted from the COG element. A summary of the findings in the COG element is being used in this element. Further information resulting in the findings may be reviewed in the COG element.

D. Definitions

Listed below are terms used in this element. Some of these may be further defined elsewhere in the text.

Scenic Corridor: The visible land area outside the highway right-of-way and generally described as "the view from the road".

Scenic Route: A highway, road, drive or street which, in addition to its transportation function, provides opportunities for enjoyment of natural and man-made scenic resources where aesthetic values are protected and enhanced.

Officially Designated Scenic Route or Highway: Scenic highways officially designated by the Scenic Highways Advisory Committee after application from local jurisdictions and only if on list of eligible highways found in Section 263 of the Streets and Highways Code.

RESEARCH

A. Functions of Scenic Highway

Among the many benefits which can be derived from the scenic highway program, the most significant appears to be in the preservation and enhancement of the scenic qualities of selected highway corridors. No other planning program is specifically aimed at the "view from the road", and the quality and beauty of this view is perhaps one of the best indicators of the character and quality of the entire area as determined by the road users. An attractive entrance to a city leaves a favorable impression on a traveler, visitor or future resident. An unattractive one leaves quite a different impression.

The improved aesthetics along these selected corridors will not only enhance the environment of those people traveling along the routes but can also improve the environment of adjacent residents. In other parts of California, where local jurisdictions have already implemented scenic highway standards, these standards have often resulted in more attractive, higher quality development in neighboring areas. The standards can be an effective tool to deter blight and to safeguard property values. In addition, the standards can provide some degree of local satisfaction, derived from knowing that outstanding scenic resources, as viewed from the highway, are being appropriate consideration in local public policy.

Another important benefit of the program is that it can very likely result in the development of roadside rests, vista points and other facilities associated with the scenic route. Roadside improvements such as these will enhance the recreational value of the route, providing an enjoyable, pleasurable place for people to visit.

In addition to encouraging quality development and promoting the establishment of roadside facilities, the scenic highways program is designed to result in the preservation of selected open spaces. Once space serves a variety of functions, not the least of which are its recreational and scenic functions. Scenic corridor open space can also be structural in nature to shape and guide development and to maintain necessary buffers between developed areas and incompatible land uses. Scenic corridors can serve a protective function by discouraging development in flood plains and earthquake zones. They can be productive if used for agriculture or water supply and lastly they can serve a psychological function by providing the opportunity of close contact with nature. The preservation of open space is important because of all the functions it serves. However, from the standpoint of a scenic highway, its aesthetic function is of prime importance.

The proper development and implementation of the Scenic Highway Element can play an important role in increasing public perception and appreciation of local scenic beauty. And, with heightened appreciation, the local citizenry is more likely to understand and to develop concern for the relationship of scenic resources to environmental quality and to the total planning program as well.

B. Methods of Selecting and Designating Scenic Highways

General

Scenic highway criteria are the means by which potential routes are identified, selected, evaluated, and the suitability of specific implementation programs is determined.

Criteria perform a number of important functions in this element such as:

1. Identifying and selecting candidate routes and establishing study priorities.
2. Guiding the delineation and evaluation of corridors.
3. Judging the effectiveness of corridor protection program and the design of roadways.

The responsibility for establishing criteria rests principally with local jurisdictions, although the state has established some general guidelines.

Three sets of criteria leading to the selection of scenic corridors will be discussed. These include criteria for: (1) the selection of a system of candidate routes; (2) criteria for initiating corridor studies; and (3) criteria for corridor boundary delineation.

Criteria for the Selection of a System of Candidate Routes

The criteria used for determining routes to be shown on the Escalon Scenic Highway System may be:

1. Urban routes with unusual or attractive views of man-made features.
2. Views of unusual topography.
3. Entry routes into the City which have substantial scenic value.
4. Routes which are continuations of those shown in the Scenic Highways Element of the County of San Joaquin or a neighboring jurisdiction, and which are of a scenic importance.
5. Routes traversing areas with a diversity of agricultural products.
6. Routes including more than one point or feature of general interest.
7. Routes with river views and/or access to recreational areas.

While the selection criteria may seem to exclude consideration of several routes of some scenic value, it ought to be remembered that a scenic highways program should strive for quality and not necessarily quantity.

Criteria for Initiating Corridor Studies

These criteria are used in the establishment of a Scenic Highway System priority list which will serve as the basis for initiating specific corridor studies. These criteria are as follows:

1. Routes with scenic resources threatened by future incompatible development.
2. Perceived need as demonstrated by public support.
3. Entry routes into the City.
4. Routes which are continuations of those being or already developed by neighboring jurisdictions.
5. Routes which offer unique opportunities for the protection and enhancement of scenic recreational and historical resources.

Routes which satisfy at least two of the above criteria are classified as first priority. All other routes are classified as second priority.

Criteria for Establishing Corridor Boundaries

While it is not within the purview of the Scenic Highway Element to delineate specific scenic corridor boundaries, a general delineation of the corridor is necessary. This is so that intelligent judgment may be exercised as to whether special regulations or zoning designations are required for protection purposes. At such time as special regulations are determined to be the best or only means of scenic protection, a specific corridor study will be undertaken. For areas where existing land use controls, such as designated open space or conservation zoning, are adequate to protect the scenic environment, specific studies and special regulations may not be necessary.

Because of the great diversity of scenic resources in and among urban and rural areas, a wide variety of criteria will be used to delineate an individual corridor. These criteria are not precise, but involve judgmental decisions on exactly how much is scenic and how much is not. In general, items to be considered fall into four broad categories. These are:

- The human element
- The range of visibility
- Scenery characteristics
- Administrative considerations

1. The Human Element

a. Aesthetic Judgment

This is essentially an individual value decision.

b. Angle and Duration of Vision

The angle at which certain areas and features may be seen from the highway, in both directions of travel; the foreground which frames them and length of time for which they're seen will all determine the dimensions of the corridor. The design speed and geometrics of the highway, and the existing or proposed locations for vista points or rest areas, must be taken into consideration. The scenic highway should provide the motorist with a continuous, and possibly varied, visual experience. This need for continuity should underscore the importance of an uninterrupted corridor.

2. The Range of Visibility

a. Topography

When a land form, such as a hill, levee, or crest of a ridge, brings the motorists' range of vision close to the right-of-way, the entire visible area should be included in the corridor.

b. Vegetation

Orchards or other dense vegetation may constitute a screen at the edge of the highway. Since the possibility exists that this screen could be removed by fire, harvesting, land use change or even the selective change or even the selective cutting for visual enhancement, consideration of the view beyond this screen is important.

c. Structures

As in the preceeding, structures need not be a controlling factor in establishing corridor boundaries.

d. Distance Visibility

Where the range of visibility from the scenic route encompasses a distant horizon or vast panorama, a closer corridor boundary may be selected based on criteria other than visibility.

3. Scenery Characteristics

a. Natural and Man-Made Features

Such outstanding natural features as water and geological formations and man-made features of architectural, historical or civic value, should be included in the corridor together with their surrounding area.

b. Landscape Character

All types of landscaping, whether wild, cultivated or urban in nature, may have scenic value and should be considered to be included in the corridor. In urban areas, the density of the landscaping or development may necessitate a narrower corridor than in rural areas.

c. Ecological Areas

The integrity of an ecological community, including the flora and fauna which contribute to its scenic value, should be preserved in its entirety if possible regardless of the visibility factor.

d. Visual Impact

The visual impact of a feature or an area may be evaluated in terms of its uniqueness, its size, its detail and its boldness of form, vividness of color and any other important characteristics which relate to its distance from the scenic route and its duration of visibility. The degree of this impact is an important consideration for the inclusion of the feature in the scenic corridor.

4. Administrative Considerations

a. Probable Methods of Protection

The possibility that certain scenic areas may be protected by such means as the acquisition of land for a public park or open space, Agricultural Preserve Contracts, or low density zoning, may influence the specification of actual corridor boundaries. This underscores the importance of studying such specific implementation measures at the same time corridor boundaries are designated.

b. Legal Boundaries

Since they are to be used for administrative purposes the precise boundaries of the corridor should coincide with property lines, zoning district boundaries, city limits or other legal designations wherever possible.

c. Arbitrary Delineation

In the absence of criteria such as those described on the preceeding pages, or because of factors beyond the control of the City, a constant line, arbitrarily selected, may be used as a corridor boundary. Even if this is not necessary, innovative techniques or other criteria not mentioned herein should be considered.

Designation Methods

Designation of a Scenic Highway requires action by a body who has authority to adopt the necessary ordinances to enforce the purpose of designation. The City may designate a Scenic Highway within its jurisdiction, however, the State is the only agency which may give official designation for the City Scenic Highways proposed in this plan.

It is not mandatory, but from the standpoint of the success of the Scenic Highways Program, it is recommended that official designation be sought for all candidate City scenic routes.

When an eligible highway becomes an official scenic highway, it will be indicated on all publications of the Department of Transportation or on any maps issued by CALTRANS to the general public. Official California State flower (poppy) signs will also be placed along the route. In addition to these recognition benefits, the State Scenic Highways Committee has recommended in its 1974 Scenic Highway Program Progress Report that the legislature develop financial incentives for increased local participation in the program. The committee stressed the need to develop funding sources to provide for amenities along officially designated routes.

The following is an outline of procedures to be followed for official scenic highway designation. Although these procedures are currently in effect, it should be recognized that they are subject to change by the State at any time. Should such change occur, this Element should be amended to keep it in conformance with the new guidelines.

1. Initiation

a. Eligibility

Any highway shown on the States' Master Plan of Scenic Highways is eligible to become qualified as an officially designated State Scenic Highway.

Standards for the selection of highways, State or County, which may be considered as eligible for official designation are contained in the publication, The Scenic Route: A Guide for the Official Designation of Eligible Scenic Highways. These criteria were utilized by the Advisory Committee in

recommending the routes shown in the State's Master Plan. The selection criteria in this document are based on these standards and should be utilized by the Planning Commission in selecting eligible Scenic Highways.

b. Local Jurisdiction

The legislative body of a county or city having jurisdiction over lands adjacent to eligible Scenic Highways has the responsibility for initiation of corridor studies leading to official designation. In Escalon, this would be the City Council.

For State Scenic Highways, the local legislative body may request CALTRANS to conduct specific studies or it may delegate its authority to initiate studies, in cooperation with the Department, to one of its own departments, employees, commissions or committees.

When a local jurisdiction desires that a study be conducted leading to official designation of an eligible route, the legislative body or its appointed delegate will notify, in writing, the District Director of the Department of Transportation. The Department of Transportation District Office staff will then be available, if needed.

c. Other Public Agencies

Local jurisdictions and other public (Federal, State, and local) agencies are encouraged to coordinate their activities in initiating and conducting studies leading to official designation of eligible Scenic Highway.

d. State of California

Responsibility for coordinating both the State and County Scenic Highways programs resides primarily with the State; however, the State generally will not act on the programs until such time as local government requests assistance from the State Department of Transportation.

2. Scenic Highway Studies

a. Corridor Survey and Highway Facility Study

Following initiation by the local jurisdiction for an eligible county scenic highway, two studies entitled "Corridor Survey" and "Highway Facility Study" must be prepared. The results of these two studies will be compiled into a single comprehensive Scenic Highway Report. CALTRANS Staff is available to advise in the preparation of this report.

The report will contain maps, photographs, and other necessary documentation showing:

1. Suggested Scenic Highway Corridor boundaries.
2. Scenic elements within the suggested corridor
3. The relationship of the right-of-way to its surrounding environment.
4. Suggested preservation of the scenic and aesthetic elements of the visual environment.
5. Any proposed realignments of the route, if known.
6. Potential locations of roadside rests, vista points, and areas for public or commercial information sites.

Upon completion, the report, when approved by Department of Transportation Headquarters, will be resubmitted to the local jurisdiction for its use in the preparation of the local scenic corridor protection and enhancement plan and program.

b. Corridor Plan and Program

The local jurisdiction shall prepare, with assistance from CALTRANS staff, as requested, the Scenic Highway Specific Plan and Program of proposed implementation measures. This requirement is mandatory if the City is to have its scenic highways "officially designated.

The local corridor plan and program should provide for the protection and enhancement of the existing natural and man-made scenic resources that contributed to the highway being included in the Master Plan. This is the primary purpose of the program. Under the policing powers given to local government by the State, it is entirely feasible for local governmental bodies to direct their efforts toward eliminating and/or preventing any unsightly development to occur within the corridor through a program involving the reasonable exercise of its powers.

Local government and the Department of Transportation are encouraged to coordinate with any and all other public, quasi public, or private jurisdictions, agencies, groups, bodies, or individuals having control over, or ownership of, lands within the corridor in the preparation of their scenic corridor specific plans and programs.

3. Review

a. Department of Transportation

The Department of Transportation District staff will forward to the Inter-departmental Committee on Scenic Highways the local Scenic Highway Plan and Program with its comments, together with the Comprehensive Scenic Highway Report. The Department, through Section 261 of the California Streets and Highways Code, is responsible for administration of the Scenic Highways Program.

b. Interdepartmental Committee on Scenic Highways

This Committee is comprised of representatives of State departments rendering assistance to the Advisory Committee. The chairman of the Inter-departmental Committee shall forward the aforementioned report to the Inter-departmental Committee members for their review and comments. The studies will then be forwarded through the Secretary of the Advisory Committee to the Advisory Committee members together with comments of the Inter-departmental Committee.

c. Scenic Highway Advisory Committee

The Committee consists of seven members appointed by the Governor from among officials of cities and counties, persons having special competence in the field of landscape architecture, land planning, and so forth. It was established under Section 227 of the Streets and Highways Code.

The State Director of Transportation shall call a meeting of the Advisory Committee in order to review the proposal for designation as an Official Scenic Highway. The Committee shall then make its findings regarding the proposal and send them to said Director with its recommendation.

d. Department of Transportation

The State Director of Transportation shall inform the local jurisdiction and the Division of Highways of his determination of the qualification of the proposal for Official Scenic Highway designation. His approval shall mean that if the local jurisdiction carries out its Scenic Highway Plan and Program as outlined in their proposal, he will, with the advice of the Advisory Committee, designate the route to be

an official State Scenic Highway. City Streets are declared official City Scenic Highways by the City Council when authorized to do so by the State Director of Transportation.

4. Implementation

a. Program Enactment

The scenic corridor boundaries and the local Scenic Highway Plan and Program, identifying the land use regulation measures to be utilized within the corridor shall be adopted by the local Planning Commission and legislative body.

b. Application for Designation

Upon adoption of the plan and program of implementation measures, the local jurisdiction shall make an application to the District Director of Transportation for official designation. The application should be in the form of a written communication containing a brief descriptive report of the adopted measures or policies for plan implementation together with a zone map of this corridor area.

The application, District Scenic Highway Report, and the local plan and program will be processed in accordance with the procedures described under Section C.

c. Official Designation

Upon receipt of the findings and recommendations of the Advisory Committee, the State Director of Transportation may make his own review.

He then shall designate the highway as an Official State Scenic Highway and notify the Advisory Committee and local jurisdiction of the action.

The designated route may then be indicated as an Official Scenic Highway on any map or other publications, and the highway will be properly signed as such.

d. Enforcement

The measure adopted by the local jurisdiction for the protection of the corridor, as identified in the local plan and program, shall be effectively maintained, upgraded, and enforced by the local jurisdiction in order to retain official designation.

The local jurisdiction shall report in writing to the District Director of Transportation on an annual basis on the maintenance or any modification to its plan and program of implementation measures, as approved upon official designation.

The State Department of Transportation shall report to the Advisory Committee, through the Inter-departmental Committee, on an annual basis on this status.

e. Revocation

The Advisory Committee, upon finding that the corridor no longer meets the minimum standards for official designation, based on the reports of the State Department of Transportation, the Inter-departmental Committee, or upon its own initiative, may recommend to the State Director of Transportation that designation of the highway be revoked.

After conferring with the local jurisdiction, the State Director of Transportation may, upon the recommendation of the Committee and upon his own findings, revoke the designation of a highway as an official Scenic Highway. Such reference shall then be deleted from new maps or other publications and signs which so identify the highway shall be removed.

C. Methods of Preservation and Improvement

General

Outlined below are some of the various methods of preserving and/or improving the scenic corridor. The physical means will be presented, along with acquisition and controls, and a review of financing.

1. Plans

a. General Plan Elements

Open Space/Conservation, Land Use and Circulation Elements should all be reviewed and revised to reflect the scenic routes and their accompanying corridors as depicted in the Scenic Highways Element.

b. Scenic Corridor Development Plan

A scenic corridor development plan shall be prepared for each scenic highway prior to official designation and shall follow the accepted format of Caltrans.

2. Zoning

The Zoning Ordinance should give particular attention to scenic values and to protection and enhancement of the corridor. The ordinance may include regulations pertaining to the following matters:

a. Architectural and Site Plan Review

Development or construction within the scenic corridor shall be governed by the base zone requirements. All development in the Scenic Corridor shall be reviewed for site plan approval, and shall consider, but not be limited to the following criteria:

1. Consistency with the requirements of the Scenic Corridor Plan.
2. Location and design of buildings to create a generally attractive appearance and a harmonious relationship with surrounding development and the natural environment.
3. Screening or location from the highway of potentially unsighted features.

b. Land Use Regulations

There shall be consistency with the objectives of the Scenic Highways Element as required by Title 7, Chapter 4, Section 65860 of the Government Code.

c. Building Heights and Setbacks

The heights, densities and setbacks of structures should be regulated so as not to obstruct important views and to be consistent with the surrounding general environment.

d. Historical Preservation

Effort should be made to inventory all existing historical sites and landmarks and to preserve them for possible inclusion in scenic corridors.

e. Sign Regulations

1. On-Premise Outdoor Advertising

The size, height, number and type of on-premise signs allowed should be the minimum necessary for identification. The design, materials, color, texture and/or location should relate to the surrounding environment. Every attempt should be made to use signs as a means of identification and not as a means of advertising.

2. Off-Premise Outdoor Advertising

All off-premise outdoor advertising shall be prohibited within the scenic corridor, if visible from the scenic highway, with the exception of approved informational or directional panels. Steps should be taken to ensure that non-conforming on or off-premise signs are either made to conform or abated.

3. Urban Related Signs

Where a scenic highway runs through an urban area, signs and outdoor advertising should be given special consideration. Sign and outdoor advertising regulations should be reviewed in their urban context and relate to such considerations as: (1) the protection of urban views; (2) compliance with public safety; and (3) respect for the proportionate and orderly appearance of advertising in relation to the environment.

3. Subdivision Regulations

When subdividers are allowed in the scenic corridor, tentative map approval should be subject to the conditions which carry out the intent of the Scenic Highway Program. These conditions include such things as:

a. Limiting Cut and Fill

Grading, removal and/or deposit of natural materials for which a grading permit is required shall not be permitted in a scenic corridor. Exceptions to this would be: (1) If the grading was done in connection with a building permit for construction in conformance with the corridor; or (2) if the grading was only minor. Tilling or preparation of the land for agricultural purposes, minor excavations necessary to plant trees, shrubs, etc., and grading to screen offensive views should be excluded from these provisions.

b. Tree Preservation

Existing specimens or stands of trees should be preserved. Mature trees which are removed should be replaced on a 2 to 1 basis.

c. Bank Seeding and Planting

Adequate seeding and planting of bare contours within the visible range shall be required to control erosion and to improve the scenic quality of the area

d. Screening and Landscaping

1. Existing or indispensable offensive land uses should be effectively screened from the view of the highway or inconspicuously located if within the scenic corridor. Effective screening can be accomplished by proper use of planting, grading or attractive fencing.
2. Sites which have been graded or which have had their vegetative cover removed should be landscaped.
3. The edges of lakes, rivers and creeks should be preserved in their natural state or treated so as to result in an attractive appearance.
4. The planting or selective clearing of vegetation to improve the view should be undertaken.

e. Limited Access to Scenic Routes

Subdivision maps should be reviewed to reduce as much as possible the number of residential and secondary routes which intersect the scenic route.

f. Cluster Development

Cluster development should be encouraged whenever it may visibly enhance the scenic corridor.

g. Easement Dedication

Subdivision maps should be reviewed in an effort to optimally locate easements to enhance the aesthetic qualities of a scenic route.

h. Road Design Standards

1. Roadway design standards (i.e., landscape use, sign and light standard design, median design, roadway treatment, etc.) shall be reviewed for harmony with established scenic corridor development plans whenever new routes are developed or existing routes modified.
2. The incorporation of bikeways and hiking and riding trails into the planning of developments along scenic routes should be considered.

i. Underground Utilities

Electrical distribution lines, cable television lines and normal street lighting power lines are currently required to be placed underground in all new subdivisions by the Public Utilities Code. The undergrounding of all other distribution lines can be specifically required ONLY by local codes and ordinances. However, the Public Utilities Code does require construction of new "distribution" lines to be out of public view (through undergrounding, removal or landscaping) when placed within 1,000 feet of an officially designated State of County Scenic Highway.

4. Building Code

Enforcement of the building code within a scenic corridor can significantly contribute to the improvement of aesthetic or scenic qualities.

5. Housing Code

The enforcement of the housing code and the prompt abatement of violations will help to maintain the scenic qualities of the corridor.

6. Fire Prevention Program

Fire prevention programs may help to avoid unsightly burns in the corridor which can destroy vegetation of scenic value.

Prevention programs should include the planting of low fire-prone trees and shrubs and increased maintenance such as mowing, disking or selective removal of fire-prone brush. Fire prevention programs should not interfere with necessary controlled agricultural burning that is normally carried out for the purpose of crop enhancement.

7. Litter Control

The adoption of an anti-litter ordinance and its strict enforcement are important parts in the effort to preserve the scenic beauty of the corridor. In all public areas (rest stops, vistas, parks, etc.) along the scenic routes trash receptacles should be provided.

8. Weed and Insect Control

Some attention should be given to the use of weed and insect control measures to eliminate unsightly conditions in the scenic corridor. However, the unnecessary destruction of wildflowers and other attractive native vegetation should be avoided.

9. Water Pollution Control

Water quality control for waterways within a scenic corridor should be enforced to minimize odor and unattractive appearance as well as possible health hazards.

10. Land Management

The protection of endangered features in the scenic corridor which are of unique or unusual value may be afforded through proper land management policies and practices. Acquisition for park space and purchase with lease-back (requiring protection measures) are among the many options available.

11. Land Transfer

If any publically-owned land in the scenic corridor should be sold or exchanged, appropriate and enforceable restrictions which would carry out the objectives of the Scenic Highways Program should be written into the deed by the public agency. This would include the resale of tax delinquent properties.

12. Land Purchase

Every opportunity for the acquisition of corridor land in fee should be considered and explored thoroughly by public agencies. The locating of public uses as appropriate to the individual corridors should also be considered. These uses would include such things as information centers, roadside rests, vista points, parks, playgrounds, wild areas, wildlife refuges, museums, etc.

13. Easements

When public uses are not contemplated, the acquisition of development rights or scenic easements by public agencies may be sought. These lesser property rights retain for the private owner full use of the land in compatibility with the Scenic Highway Program.

14. Land Conservation Act

The use of the California Land Conservation (Williamson) Act provisions to preserve agricultural, scenic corridor and open space land should be pursued by landowners and encouraged by the City.

15. Urban Renewal and Development

Many of the governmental actions which are suggested for use in urban renewal and development programs, might be considered for the environmental improvement of existing or proposed scenic corridors.

16. Gifts and Dedication

Gifts and dedication of land to a public agency should be encouraged. Private citizens and groups can be involved in setting up non-profit land banks or trusts to preserve open space in perpetuity, without the chance of sale or misuse.

17. Fiscal Policy

The assessment of properties within a scenic corridor should reflect restrictions upon the use of the property. This practice can be conducive to a more willing acceptance of the reasonable regulation of land use within the corridor and to the dedication of easements at a nominal public cost. The concept for this practice is comparable to that for soil conservation, timber production and exclusive agriculture and should be expanded to include scenic protection and enhancement.

18. Citizen Action

Dominating the list of measures to implement the Scenic Highways Program, the awareness, understanding and contributions of the public are the principle keys to its success.

A Scenic Corridor Review and Advisory Committee, of local origins could be established to help create this awareness and to spark public and private action on the development and maintenance of the Scenic Highway System. Annual clean-up campaigns in scenic corridors, efforts to raise the level of general maintenance of public and private properties and promotion of the program would all be suitable activities for the Committee.

The Committee could also be involved in the review of all activities and/or development in the corridors which may effect their scenic qualities. The Committee could act as an advisory board to local jurisdictions advising both staff and legislative bodies of adherence of activity or development plans to the intent of the Scenic Highway Program and to specific scenic highway development plans.

D. Inventory of Possible Routes

The following routes have been proposed for scenic highways in San Joaquin County by the Council of Governments. Listed below are those in the Escalon area.

ROUTE 6 (consisting of River Road from Santa Fe Road to North Ripon Road)

DESCRIPTION - This route begins at the intersection of River Road and Santa Fe Road south of the City of Escalon. This route parallels the course of the Stanislaus River which is occasionally visible from a somewhat elevated vantage-point. The route is lined with orchards, principally walnut, and vineyards. The route ends at the intersection of River and North Ripon Roads.

APPROXIMATE LENGTH - 10 Miles

There are no routes within the existing City Limits of Escalon.

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STATEMENT OF DEVELOPMENT POLICIES

A. OBJECTIVES

1. To preserve, enhance, and protect the natural and man-made scenic resources visible from Scenic Highways in Escalon.
2. To provide for increased and enhanced recreational, cultural and educational opportunities as a part of the Scenic Highways Program.
3. To enhance the image of the City's, and thus the well-being of its people.

B. GUIDING PRINCIPLES

1. To identify, review and establish a system of scenic highways in Escalon.
2. To encourage and utilize existing city programs for renewal, enhancement and environmental preservation of scenic corridors, including but not limited to landscaping and tree programs, anti-litter programs, water quality control, utility line undergrounding programs, and urban renewal and community development.
3. To encourage the attainment of Official State Designation for city scenic highways.
4. To develop and apply standards to regulate the type and quality of development within individual scenic corridors.
5. To remove, relocate, or screen visual pollution from scenic highway corridors.
6. To require the use of aesthetic design considerations for road construction, reconstruction, or maintenance for all scenic highways.
7. To coordinate scenic highway programs with other jurisdictions, recognizing that scenic routes are a resource of more than local importance.
8. To encourage increased maintenance of scenic highways to retain a clean, neat and well-cared for appearance.
9. To encourage the establishment of scenic highways which provide access to recreational, historical and cultural facilities and to urban and rural open space areas.

10. To encourage public transit to utilize scenic highways.
11. To encourage the use of bicycles as an alternative mode of travel for recreational and utilitarian purposes in scenic corridors and to provide appropriate rights-of-way or facilities.
12. To provide recreational uses such as trails, picnicing, observation points, parks, and roadside rests along scenic highways as appropriate.
13. To inventory and take steps to protect and maintain historical landmarks, historical monuments, unique natural features and other scenic qualities for inclusion in future scenic route systems.
14. To maximize within scenic corridors the compatible multi-purpose objectives of open space planning, from recreation and conservation to public health and safety.
15. To promote an awareness and use of the amenities of scenic routes for all segments of the population.
16. To encourage citizen involvement in all phases of the development of the Scenic Route System.
17. To encourage the stabilization or increase of property values and the economy of Escalon through the preservation and promotion of its scenic qualities.

C. STANDARDS

The standards proposed are the State of California Planning and Design Standards which were developed for the State Scenic Highway System. These standards were chosen because: (1) They represent minimal standards for scenic protection; (2) they are indirectly referenced to in the Scenic Highway Element Law; (3) they are currently applied to state or county routes designated as Official Scenic Highways; and (4) they would be common to all Scenic Highway Systems.

These standards, as shown below, are excerpted from Article 2.5 of the California Streets and Highways Code, the code pursuant to which the Scenic Highways Element is to be developed.

Planning and Design Standards for Scenic Highways

261 . . . "The standards for official scenic highways shall also require that local governmental agencies have taken such action as may be necessary to protect the scenic appearance of the scenic corridor, the band of land generally adjacent to the highway right of way, including

but not limited to (1) regulation of land use and intensity of development; (2) detailed land and site planning; (3) control of outdoor advertising; (4) careful attention to and control of earthmoving and landscaping; and (5) the design and appearance of structures and equipment."

Additionally, this element adopts the State's design standards for new highways. These standards are taken from the state publication entitled, The Scenic Route, and are listed as follow:

1. The establishment of general alignment and grade to fit the scenic character of the area to be traversed.
 - a. Curvilinear alignments should be stressed.
 - b. The highway profile should be rolled to fit the topography.
2. The reduction to a minimum of all roadway cut and fill scars.
 - a. Elimination of cuts or fills wherever possible. This may be accomplished through the use of tunnels and/or bridges when necessary.
 - b. Flatten or contour all grades and landscape slopes where they cannot be eliminated.
 - c. Acquisition of wider rights of way or scenic easements should be encouraged where (1) Access control is necessary; and (2) The elimination of outdoor advertising and unsightly development through zoning should be required.
 - d. The provision of vegetation screens for the purpose of hiding objectionable views.
 - e. Selective clearing of vegetation to open up or provide views of desirable scenic qualities.
 - f. The location of and/or design of structures with an intent to achieve beauty or aesthetic qualities.
 - g. The provision of erosion control standards.
 - h. The provision of roadside parking areas and lookouts wherever scenic vistas are warranted,

or State System.

This element proposes for plan implementation the continued review by the City Council, the Planning Commission and the City staff, the possibilities of the development of a scenic route or routes within the City.

BIBLIOGRAPHY

1. General Plan Guidelines. California Council on Intergovernmental Relations, September 20, 1973.
2. Scenic Highways Element, San Joaquin County Council of Governments, August, 1975.

RESOLUTION NO. 75-1

A RESOLUTION OF THE ESCALON CITY PLANNING COMMISSION
RECOMMENDING APPROVAL OF THE SCENIC HIGHWAY ELEMENT
OF THE ESCALON GENERAL PLAN.

WHEREAS, The Escalon City ~~Planning Commission~~ has studied and prepared the Proposed Scenic Highway Element of the General Plan for the City of Escalon; and

WHEREAS, a public hearing for the purpose of allowing all persons to be heard for or against the Proposed Scenic Highway Element was set for the 8th day of September, 1975 at 7:45 P.M., and notice of said hearing was duly published the 27th day of August, 1975 in the Escalon Times; and

WHEREAS, The Planning Commission has considered said Proposed Scenic Highway Element.

NOW, THEREFORE, BE IT RESOLVED BY THE ESCALON CITY PLANNING COMMISSION, as follows:

1. The Planning Commission has found the Proposed Scenic Highway Element is suitable for the Scenic Highway needs for the controlled development of the City of Escalon, and does hereby recommend to the City Council of the City of Escalon the adoption of the Scenic Highway Element.


2. That a certified copy of this Resolution be forwarded to the City Council of the City of Escalon by the Planning Commission Secretary as the report of the Planning Commission.

Passed and adopted this 8th day of September, 1975.


AYES: Commissioners: Blixt, DeBie, Latta, Miller and Chairman Stewart

NOES: Commissioners: None

ABSENT: Commissioners: None


D. B. Stewart, Chairman, Escalon
City Planning Commission

ATTEST:


Earl Wilson, Secretary,
Escalon City Planning
Commission

Adopted by Resolution No. 75-1 of the Escalon City Planning
Commission this 8th day of September, 1975.

ATTEST:

/s/ D. B. Stewart
D. B. Stewart
Chairman

/s/ Earl Wilson
Earl Wilson
Secretary

Adopted by Resolution No. 388 of the Escalon City Council
this 15th day of September, 1975.

ATTEST:

/s/ Carl J. M. Vilen
Carl J. M. Vilen
Mayor

/s/ Earl Wilson
Earl Wilson
City Clerk

RESOLUTION NO. 388

A RESOLUTION OF THE CITY COUNCIL OF THE CITY
OF ESCALON ADOPTING THE SCENIC HIGHWAY ELEMENT
OF THE ESCALON GENERAL PLAN.

WHEREAS, The Escalon City Planning Commission has studied and approved the Scenic Highway Element of the Escalon General Plan; and,

WHEREAS, a public hearing was duly noticed before the City Council for September 15, 1975, by publication in the Escalon Times on September 3, 1975;

NOW, THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ESCALON, as follows:

1. That the Scenic Highway Element of the Escalon General Plan is hereby approved.

2. That the Scenic Highway Element shall be endorsed by signature of the Mayor of the City of Escalon, attested by the City Clerk of the City of Escalon, to show that it has been adopted by the City Council.

PASSED AND ADOPTED this 15th day of September, 1975 by the following vote:

AYES: Councilmen: Bodin, Focha, Hagan and Mayor Vilen

NOES: Councilmen: Polhemus

ABSENT: Councilmen: None

/s/ Carl J. M. Vilen
Carl J. M. Vilen, Mayor

ATTEST:

/s/ Earl Wilson
Earl Wilson, City Clerk

ORIGINAL
CITY OF ESCALON
GENERAL PLAN
CONSERVATION AND OPEN SPACE ELEMENT

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CONSERVATION AND OPEN SPACE ELEMENT OF THE ESCALON GENERAL PLAN

I

INTRODUCTION

A. General

This element combines the required conservation and open space elements. The purpose of this plan is to set forth background information, goals and development policies related to conservation and open space in the Escalon area. It presents an analysis of the physical resources, cultural resources and natural processes that exist, a plan, and a work program for plan implementation. This element clarifies and supplements the policies and maps adopted in the Escalon General Plan. It will also be used to review and update various elements in the General Plan to keep the document internally consistent. The recreation aspect of open space is dealt separately in the Recreation Element of this plan and will not be discussed further in this element.

Because of the nature of the Escalon area being larger than the existing or proposed city limits as viewed with today's governmental structure, the interpretation of this Element will re-enforce inter-agency and inter-governmental cooperation for the effective conservation of resources with orderly development. It will also provide major data and policy baseline from which to analyze the impact of environmental proposals.

B. Legislative History

The California Legislature foreseeing the need to conserve natural resources and maintain open space, passed legislation authorizing cities and counties to develop these elements as part of their general plan. Because of haphazardous development in parts of the State and the current concern with the environment, the Legislature during the 1970 session mandated a conservation element and an open-space element is to become a part of the General Plan by June 30, 1972. This deadline has now been extended to December 31, 1973.

Section 55392(d) of the Government Code of the State of California requires of the city general plan:

A conservation element for the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. That portion of the conservation element including waters shall be developed in coordination with any countywide water agency and with all district and city water agencies which have developed, served, controlled or conserved water for any purpose for the county or city for which the plan is prepared. The conservation element may also cover:

- (1) The reclamation of land and waters.
- (2) Flood Control.
- (3) Prevention and control of the pollution of streams and other waters.
- (4) Regulation of the use of land in stream channels and other areas required for the accomplishment of the conservation plan.
- (5) Prevention, control, and correction of the erosion of soils, beaches and shores.
- (6) Protection of watersheds.
- (7) The location, quantity and quality of the rock, sand and gravel resources.

Section 65302(e) of the Government Code requires an open-space element of the general plan. The findings of the Legislature are stated in Section 65561 as follows:

- (a) That the preservation of open space land.....is necessary not only for the maintenance of the economy of the State but also for the assurance of the continued availability of land for the production of food and fiber, for the enjoyment of scenic beauty, for recreation and for the use of natural resources.
- (b) That discouraging premature and unnecessary conversion of open-space land to urban uses is a matter of public interest and will be of benefit to urban dwellers because it will discourage noncontiguous development patterns which unnecessarily increase the cost of community services to community residents.
- (c) That the anticipated increase in the population of the State demands that cities.....at the earliest possible date make definite plans for the preservation of valuable open-space land and take positive action to carry out such plans by the adoption and strict administration of laws, ordinances, rules and regulations as authorized by this chapter or by other appropriate methods.

The Legislative intent is stated in Section 65562:

- (a) To assure that cities and counties recognize that open-space land is a limited and valuable resource which must be conserved wherever possible.
- (b) To assure that every city and county will prepare and carry out open-space plans which, along with State and regional open-space plans, will accomplish the objectives of a comprehensive open-space program.

To assure this intent, Section 65563 states:

On or before January 1, 1974, every city and county shall prepare, adopt, and submit to the Secretary of the Resources Agency a local open-space plan for the comprehensive and long-range preservation and conservation of open-space land within its jurisdiction.

C. Preparation History

An open-space element applicable to San Joaquin County was developed and adopted June 27, 1972 by the San Joaquin County Council of Governments (formerly the Cities and County of San Joaquin Advisory Planning Association). Input for development of this element was supplied by the Citizens Advisory Committee appointed by the C.O.G. member agencies, citizens who attended the "Tomorrow, Tomorrow, Tomorrow" Conference held in February, 1972, and the planning staffs of the Cities and County. An Interim Open Space Element of the Escalon General Plan was prepared by extraction from the county-wide element those portions applicable to Escalon, along with local information that is considered necessary in the Escalon area, but not to San Joaquin County in general. This Interim Open Space Element was adopted by the Escalon City Council October 2, 1972 knowing that this would be superseded by a revised element prior to the required date of adoption.

While the open-space element concentrated on broad policies, the design of element preparation was to have the conservation element discuss in greater detail areas related to natural resources. The C.O.G., through a comprehensive planning grant from the Department of Housing and Urban Development, prepared a conservation element for San Joaquin County. This element was adopted by C.O.G. June 26, 1973. As with the open-space element, those portions applicable to the Escalon area were extracted for this City's element. By combining the open space and conservation elements, a plan is prepared without excessive duplication and cross references to the similar or identical subjects contained in the separate elements. Further information resulting in the findings may be reviewed in the C.O.G. elements described above.

D. Definition

Listed below are terms used in this element. Some of these may be further defined elsewhere in the text.

Conservation. The planned management, preparation and wise utilization of natural resources. The objective of conservation is to prevent the wasteful exploitation, destruction or neglect of these resources.

Open Space. This term, as used in this general plan, includes:

1. Areas providing outdoor facilities.
2. Areas to be held in reserve for the protection of natural, historical and cultured resources.
3. Areas to be maintained in agricultural production.
4. Areas unsuitable for development by reason of geological features, high safety risks, or ecological fragility.
5. Areas, which by virtue of their scenic and/or natural amenities, provide for the enhancement of the environment.

6. Areas to be used for controlling development to achieve a desired regional form.
7. Areas for public safety, utilities and transportation.

RESEARCH

A. Functions

The purpose of listing the functions of conservation and open space features is to identify their use, establish their relationship with development, and how they can be best utilized for man's benefit today and in future generations.

1. Conservation Functions.

Water Resources. Water is one of San Joaquin County's most important resources. Ground and surface water is used for irrigation of agricultural lands, and for commercial, industrial, recreational and domestic purposes.

The Central Valley in which Escalon is located enjoys a Mediterranean like climate. The characteristics of this type of climate--long warm dry summers with short moderately moist winters--create ideal living conditions. The presence of highly productive soils support intensive agriculture. wildlife, fish and natural vegetation are dependent on water for their existence. Agriculture, the population, and natural life needs demand water.

Flood Hazards. Flooding historically was a common occurrence in certain portions of the San Joaquin Valley and in particular in the Sacramento-San Joaquin Delta area. Flooding is a natural phenomenon and serves a useful purpose in the balance of nature. However, flooding does not fit into man's pattern of activity. As the area that is now known as San Joaquin County became more intensely developed, flooding became a hazard to life and property. In the attempts to reduce the hazard of flooding, man took the approach of altering nature to fit his pattern of activity. Vast sums are spent every year by various reclamation and flood control districts to maintain the facilities constructed to protect flood hazard areas. There are pressures to develop these areas despite the knowledge they are historic flood plains and subject to damaging floods should flood projects fail to contain the high water.

Damage to urban development located on flood plains can be extensive. Floodwaters can also disrupt utility and transportation services, create health hazards, and damage agricultural operations. The direct inundation or force of the floodwaters may cause these problems, but they may also be caused by floating debris, sewer or septic tank backup, seepage, erosion, siltation, and water pollution.

Submerged roadways can delay evacuation; fallen utility lines can be dangerous; and damaged structures can become hazardous floating debris.

Vegetative Resources. Vegetation includes forests, agricultural areas, watershed areas, marshes, street trees, parks and other rural and urban vegetation. It furnishes food and air for both man and animal, provides soil protection and replenishment, and timber production. In the urban areas, vegetative resources provide shade, some habitate, recreational areas, and are generally aesthetically pleasing. Vegetation can also be used to provide a natural barrier between different land uses, and a quieter environment.

Conservation of some of these resources is to assure that young growing trees and other vegetation areas will mature and be useful to future generations.

Harbors and Fisheries. Harbors, and harbor related activities provide commercial and water orientated recreational activities along certain portions of waterways. Adequate access roads are necessary for maximum or best use of the harbors. Location and development of harbors are dependent on access, related uses of land in the area, and minimum adverse impact to the conservation or enhancement of vegetation, riparian habitat and water quality.

Fisheries provide man with a recreational and commercial purpose. Fish are also part of food chain for wildlife. Fish are dependent on other fish, fish eggs, bottom living animal organisms, and aquatic vegetation. Any disturbances in the food chain and supplies affects the fisheries.

Wildlife. Wildlife includes mammals, birds, amphibians and reptiles. It can only survive if water, food and habitat are available. Wildlife has commercial, recreational and educational purposes for man. The habitat provides a place for breeding and seasonal concentration of various species. All wildlife are inextricably interwoven through the intricate process of the food chain. Some wildlife species vary greatly in their ability to compete with man and his works. Other forms are not desirable and cause both irritation and economic loss. Endangered species represent a challenge for man to maintain for future generations.

Minerals. Mineral products are used for building materials, fuels, and industry for other commercial purposes. The resources must be accessible for economical extraction, processing and maximum utilization of the source.

Soil Resources. Soil, with proper care and management, provide a basic necessity of life of paramount importance. Food is a basic necessity, and without highly productive soils, the increasing demand of the world's growing population would far exceed the food supply. Increases in population increase the demand for land in and around urban centers. Conflicts arise when these urban centers are located in areas of highly productive soils. Preservation of prime agricultural land will assure that agriculture will remain a major industry in the state and supply the food and fiber needed by man.

Air Quality. Air of a high level of quality is necessary to protect public health. Without air, all forms of life would cease.

Historic Sites and Landmarks. Historic sites and landmarks are unique reminders of the social, economic and political history of man. They serve as a source for public recreational and educational activities. Preservation of certain sites assures that future citizens will have an opportunity to share in the experiences of man in the past.

2. Open Space Functions.

Productive. Open space areas can be land that is in production for man's benefit. It is not vacant land. Agriculture and forests are two examples where the land is open and being put to productive use.

Protective. Some areas should be kept open for the public health, safety, and welfare. They present natural hazards and are often referred to as negative open space because they are generally unsuitable for urban development. These areas, include geologic hazard lands (fault zones, nonstructural bed-rock lands, lands with steep slopes), soil hazards (lands with poor drainage), and hydrologic hazard lands (floodplains, land with a high water table). The human organism does not live in a vacuum. The protective function of open space extends to the protection not only of people but to environmental preservation in general. Wildlife can be preserved only if we retain habitat; in order to maintain our water quality, we may have to regulate development in watersheds.

Structural. Some areas of the county should be left unimproved to provide separations between incompatible land uses, and to shape and guide development. When communities and cities run together, community identity is lost.

Recreational. Recreational areas are either in or near population centers or in areas which offer outstanding natural features. These include rivers and parks. Scenic highways, trails, and waterways provide pleasure as the parks.

Scenic. Certain lands serve a scenic function. Waterways, orchards, open fields and oak-studded rolling hills contribute to the beauty of the county. A patch of natural landscape in an otherwise developed area provides visual relief to the concrete and glass of urbanization.

Psychological. The psychological function of open space is the most difficult function to describe, although it may be one of the most important. Nothing man-made or artificial can provide the same feeling that certain open lands provide to our sense of inner well-being. The quiet solitude one experiences while fishing along a tree-lined waterway might be an example. A mini-park in a bush shopping section can convey a similar feeling.

Multiple. A given open space may serve several functions. A wooded water course, for example, has protective value as a flood channel, as well as recreational and scenic values. This same waterway may provide wildlife habitat which itself has a protective and recreational function. This multi-function concept of open space lands should be emphasized. While some uses of land can destroy the overall value of open space, other uses can exist in harmony.

B. Inventory

General. The following is background information on trends in peoples' activities, and an inventory of the physical resources available for the compatibility of human activities with natural resources and open space. The inventory will briefly describe those features of the Escalon area. Greater detail may be obtained in the Conservation Element and Open Space Element adopted by C.O.G.

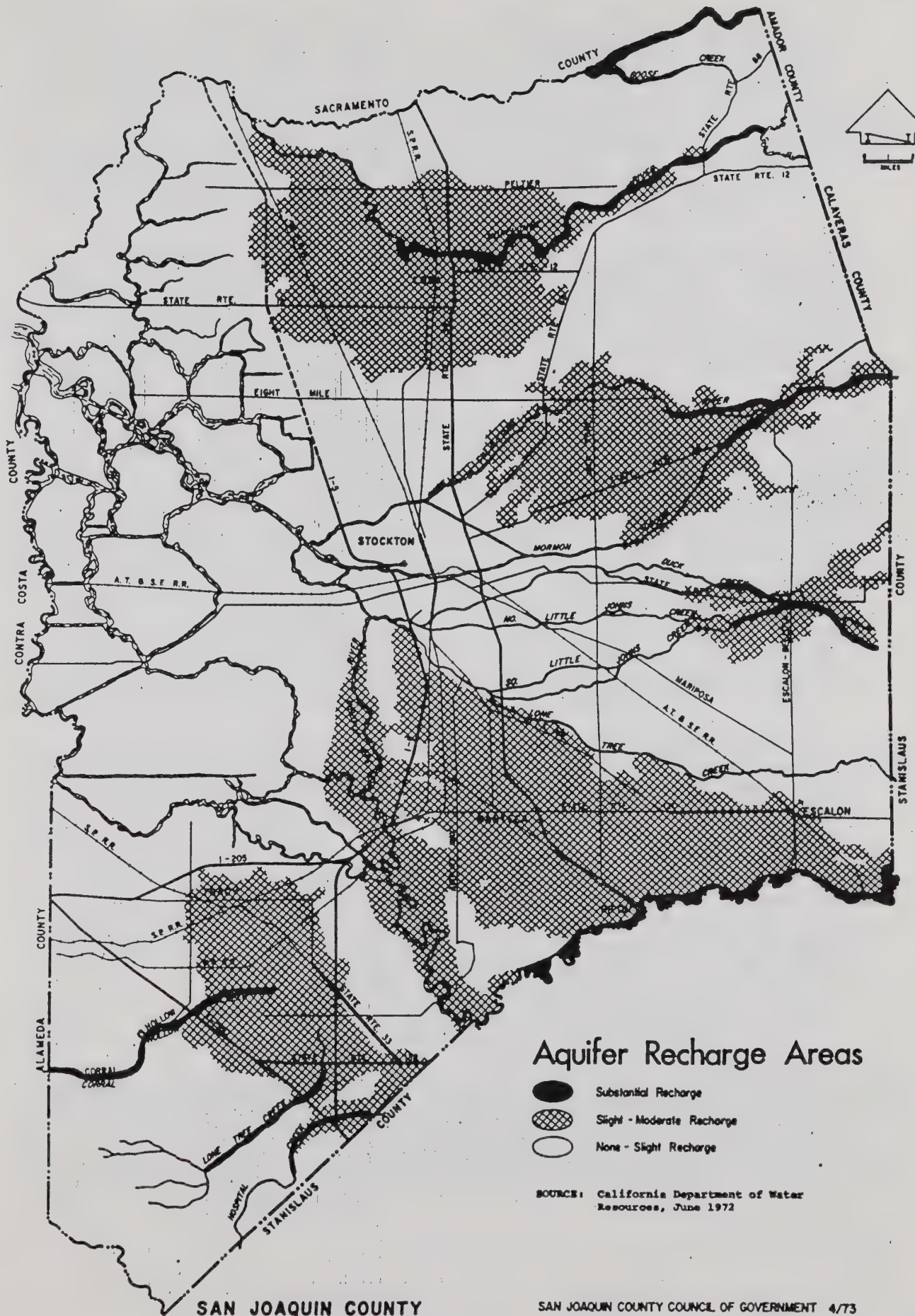
Water Resources. Virtually no rain falls from May to October. To provide for a sufficient year-round supply of water to meet the needs of agriculture and the population ground and surface supplies are necessary. The County is underlain with geologic formations producing large quantities of generally good quality water. Additional sources of water are the rivers and streams that flow through the County. Rivers in their natural state, however, are reduced to dry streambeds or mere trickles in the season. For this reason extensive water projects were initiated and large storage facilities were constructed on the rivers to assure minimum flows year-round with excess water available for various domestic and agricultural uses.

Ground-water is a major source of the water consumed in the County and accounts for all the domestic supplies at this time, including Escalon. Ground-water users need not be concerned with turbidity, algae, temperature changes, pathogenic bacteria, nor sudden changes in quality. Possibly the greatest value of ground-water is its low cost when compared to the cost of imported surface water.

The replacement of ground-water is referred to as aquifer recharge. The mechanics of aquifer recharge are dependent upon surface infiltration rates (rate at which water will enter the soil), soil permeability (the characteristic of the soil that allows air and water to move through it), and the nature of the subsurface geologic formations.

The capabilities of aquifer recharge areas in the County vary from providing slight to substantial recharge. Areas providing substantial recharge occur along the channels and streams that enter the valley in San Joaquin County. Map I shows the aquifer recharge areas, and the Escalon area contains all various types.

The quality of ground-water can be degraded by saline intrusion, cross-connections between strata of poor quality and good



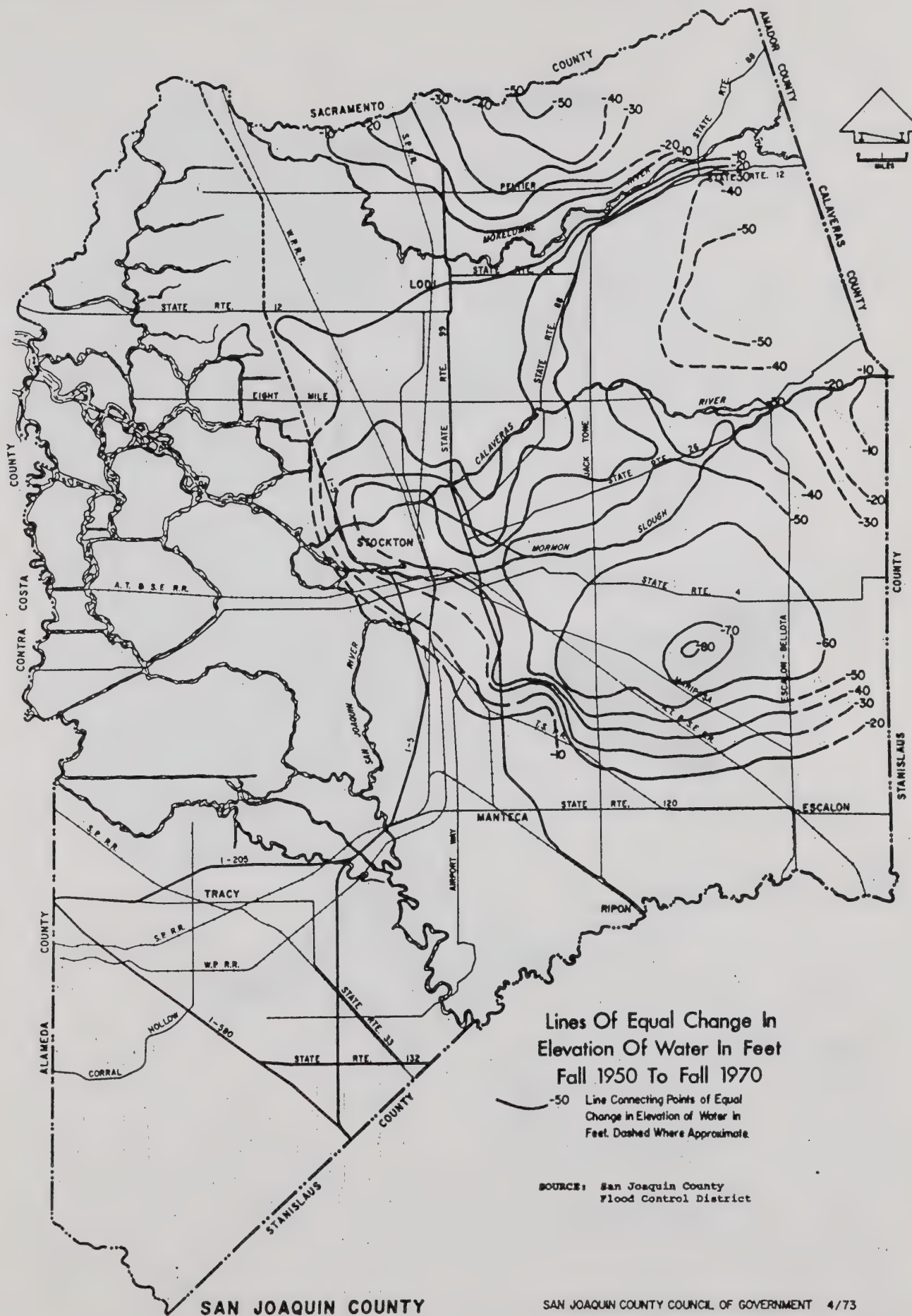
quality ground-waters, cross-connections between sewerage wastewaters and ground-waters, and recharge from agricultural wastewater with high saline content. The San Joaquin Local Health District can document no instances of well pollution by means of a cross-connection between ground-water and wastewater. Nevertheless, current waste disposal practices may in the future present a problem to ground-water quality. In the Conservation Element adopted by C.O.G. the Escalon area was not identified as having any problem of the ground-water being degraded.

In the Conservation Element of C.O.G., it was noted in the study of the Stockton area that overdraft pumping of ground-water to the east was causing a saline intrusion. An accompanying map (Map II) shows the lines of equal change in elevation of water over a twenty year period. Although no change was shown for Escalon, the area north of Escalon did show a drop during the period.

Surface water of interest to the Escalon area is the Stanislaus River. It forms the southern boundary of San Joaquin County and flows into the San Joaquin River. Water from the river is used for irrigation and two irrigation districts within the County, the Oakdale and South San Joaquin, along with the Modesto Irrigation District jointly constructed Melones Dam and Reservoir. A new dam, New Melones, is to be built upstream from the old site. Upon completion, flows in the river will be further regulated and, aside from providing additional irrigation water, the increased dry season flows will supplement the water from the San Joaquin River and assist in alleviating some of its quality problems by dilution. Quality problems in the river have occurred from irrigation and dairy wastes.

Flood Hazard. Definite boundaries of flood hazard areas in the County are not available. Until precise flood hazard areas are determined, the map of Areas of Potential Flooding is being used as an indication of problem areas. (See Map III) Anyone proposing a building in these areas should be warned of the possibility of flooding and the building should be floodproofed by raising its elevation. The Boundaries of all the designated areas have been compiled by the San Joaquin County Flood Control District from studies by the U.S. Army Corps of Engineers and other federal and state agencies. Flood plain areas as shown on the map are generally those areas not protected by levees; flood prone areas are those areas believed to be subject to flooding in the event of a flood which is in excess of the amount for which the adjacent channel was designed.

Vegetative Resources. The C.O.G. Conservation Element has noted that the extensive agricultural development in San Joaquin County has resulted in removal of native vegetation leaving very few native plant species. Certain species are known endangered in San Joaquin County, however none were mentioned specifically as being in the Escalon area.



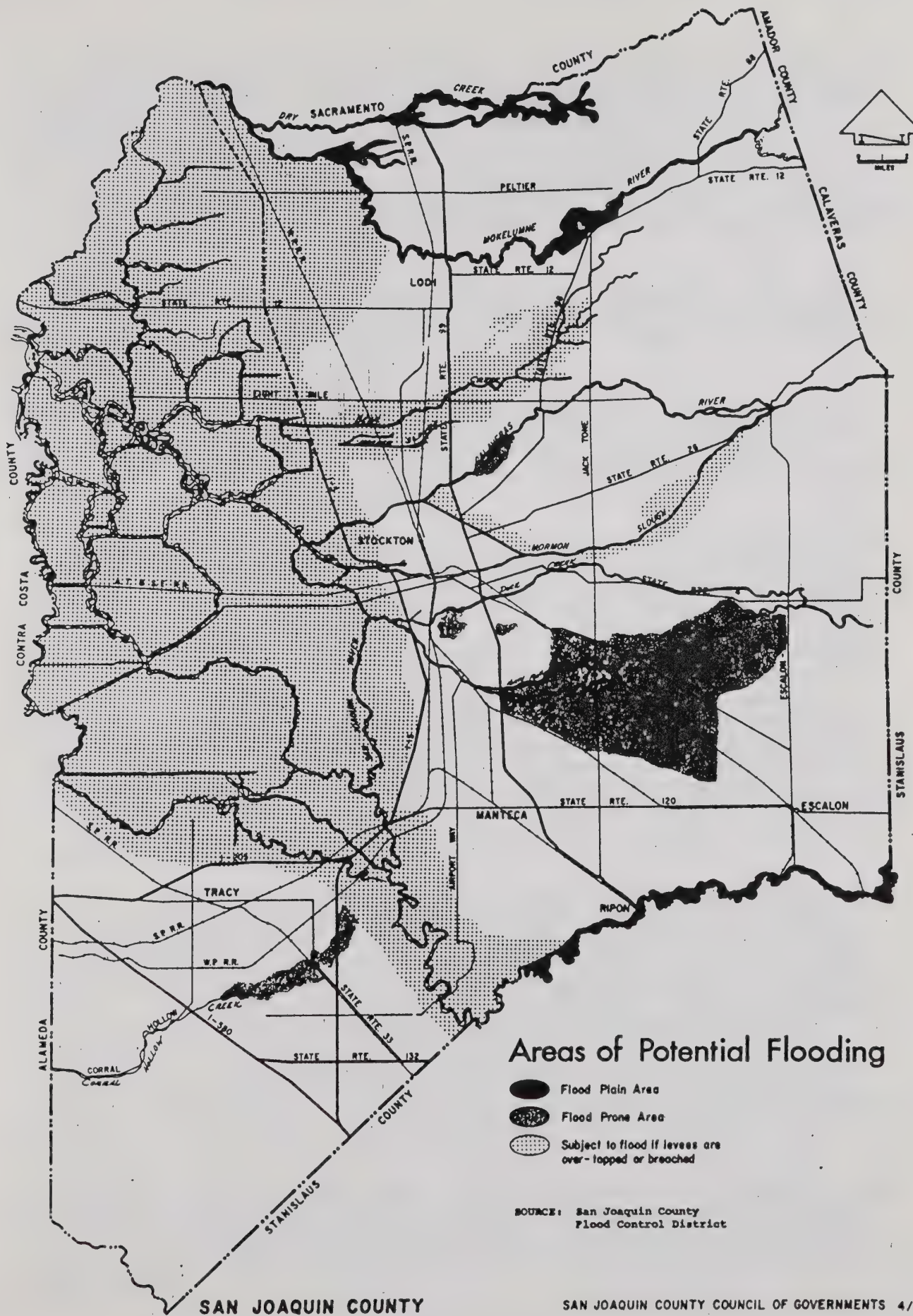
Lines Of Equal Change In
Elevation Of Water In Feet
Fall 1950 To Fall 1970

—50 Line Connecting Points of Equal
Change in Elevation of Water in
Feet. Dashed Where Approximate.

SOURCE: San Joaquin County
Flood Control District

SAN JOAQUIN COUNTY

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Riparian habitat, which consists of the vegetation lining of rivers and streams, is located in the Escalon area along the Stanislaus River. This vegetation accounts for much of the County's scenic beauty as well. It may occur as a narrow strip of trees and shrubs on either side of a stream or it may be several hundred feet wide, as in the flood plain of a river. The trees are mainly willows and cottonwoods, and large thickets of blackberries are common among wild roses and numerous shrubs and vines.

Within Escalon, trees line many of the streets. Trees are also required on each lot in new subdivisions. These trees are both of the deciduous and evergreen type. Parks also provide vegetation within the City.

Harbors and Fisheries. The Escalon area does not contain any harbors and none are planned, boating activity is minimal on the Stanislaus River in the Escalon area, therefore harbor facilities have not been considered. For these reasons, harbors will not be further discussed.

The Stanislaus River is one of the three major rivers in San Joaquin County that supports important game and nongame fish populations. The river has been ranked "extraordinary" by the State as a salmon and "two story" (contains warm-water varieties and fresh-water trout fisheries) stream fishery. There is now only a fall salmon run up the Stanislaus River to the spawning grounds below Goodwin Dam. The estimated salmon spawning escapement was 13,600 in 1971, which was greater than previous years with a 200 fish low in 1963, and 1947 to 1959 averages of 11,000 fish. Irrigation diversions have reduced the run and inadequate flows affected movement of young and increased vegetative growth on spawning gravels. Thirty-five percent of the available spawning gravels have been lost since 1961 as a result of intensive agriculture in the floodplain, floods, vegetative encroachment and gravel extraction.

Fish identified in San Joaquin County, which may or may not be found in the Stanislaus River include from the anadromous species (migrate from salt-water to fresh-water for spawning) striped bass, king salmon, steelhead, sturgeon, American shad and silver salmon. White and black crappie, white and channel catfish, bullheads, bluegill, largemouth bass, smallmouth bass, and green and red-ear sunfish are all warm-water resident varieties. Trout is a cool-water fish. All of the preceding are game fish. The following are some of the non-game fish found in warm and cool water: carp, Sacramento squawfish (pike), Sacramento blackfish, hitch, splittail, western suckers and others.

Wildlife. San Joaquin County, like the rest of California, lies in the Pacific Flyway, and is a major wintering area for many species of waterfowl and shorebirds. The County also has large populations of other game birds, such as pheasant, dove and valley quail.

San Joaquin County still ranks high among California counties in commercial fur trading. In 1970-71 the County was fourth in muskrats, first in mink, and sixth in beaver. Although these species of wildlife are of commercial importance, the real importance is that these animals are still available.

The only big game in the County is deer, found in the coastal range hills and along the rivers in the eastern portion of the County.

The rare giant garter snake has historically inhabited the valley floor into the foothills, Black-crowned night herons, sharp-shinned hawk, copper hawks, prairie falcons and burrowing owls, all very close to becoming rare, are also found in the County.

The Escalon area was not specifically identified as an area in the C.O.G. Conservation Element as having any endangered species of wildlife.

Wildlife Habitat. Wildlife has three basic needs, food, water and cover. There are no publicly designated wildlife preserves in the County, although several private land owners encourage the use of their land by prohibiting hunting and planting shrubs which provide cover. A few owners open their land to groups for for nature study.

The agricultural fields themselves provide feeding grounds for many species of birds, although undesirable for the farmer.

Additional wildlife cover is found along roadsides and drainage ditches, but all too often the vegetation in these areas is destroyed. These linear areas are particularly valuable for wildlife during January and February with the fields plowed under or flooded.

There are no designated wildlife habitat lands in the Escalon area.

Minerals. San Joaquin County's present extractive resources are natural gas and sand and gravel. Both of these resources are becoming increasingly important as demands continue to rise. Natural gas fields are not located in the Escalon area and will not be further discussed.

The emergence of the sand and gravel industry in San Joaquin County came about in the early years of the 20th century, its growth being directly correlated with, and dependent upon the growth of the County. Sand and gravel, in terms of mine units produced, is the largest segment of the mining industry in the United States, and San Joaquin County's largest extractive industry. Nearly all sand and gravel deposits of economic importance in San Joaquin County are stream deposits. They vary in mineral character and position, but are generally unconsolidated and flat lying. Most deposits that have been mined have been geologically young, but as these younger deposits become depleted, older material will have to be mined.

In the extractive process, there are two distinct areas within a site; one for excavation, and the other for processing. Although physically separated to some degree, these areas are directly related to each other in the total operational scheme. The basic stages included in a typical operation are:

1. Removal of the overburden involving the stripping of all surface material covering the deposit and relocating it or transporting the overburden from the site.
2. Extraction of the resource from the deposit and transporting for processing.
3. Processing may include part or all of the steps of conversion, screening, washing and stockpiling.
4. Delivery of the processed material to the consumer.

Several sand and gravel deposits are in the Escalon area located along the Stanislaus River. One deposit is located in the southeast corner of the County, however, it was not an operating excavation site based on 1971 and 1972 Use Permits issued by the County. An operating site is located between McHenry Avenue and the Santa Fe Railroad.

Soil Resources. San Joaquin County is unique because it has a wide range of soils. These soils can be classified by several different methods on the basis of their characteristics.

Two of the most common classification systems are the Storie Index Ratings developed at the University of California and the Land Use Capability Classes developed by the U. S. Soil Conservation Service. Both systems are based on the versatility and ease of farming a soil. The largest number of crops a soil will grow is the determining factor in the Storie Index, while the least number of problems encountered with plant growth is the determining factor in the Land Capabilities system. A soil which will grow all crops climatically adapted in the area will have a Storie Index rating of 100% or nearly so, while a soil with few problems for plant growth will be designated Capability Class I. Table I shows a general relationship of the two systems and their general description.

With the existence of several soil classification systems, there is considerable confusion when an effort is made to define what constitutes prime agricultural land. Any attempt will undoubtedly create many problems, one being the exclusion of marginal soils that are capable of producing highly profitable specialty crops. Such a situation forces the realization that economics play an important role in determining the degree of profit to be obtained from agricultural land.

Since economics do not deal with constants but with variables, the economics of each situation should be considered but not allowed to become a determining factor in the establishment of criteria. The justification for protecting only those soils

TABLE I
A VOCABULARY OF AGRICULTURAL TERMS AND A GROUPING OF SOILS BASED UPON
THEIR ABILITY TO PRODUCE A DECREASING TYPE AND NUMBER OF CROPS

General Quality	Soil Capability*		General Description*
Superior	Class I	Storie Index 80-100	Land able to produce most locally adaptable crops and its ability to produce is only slightly limited by any characteristic of the soil itself.
	Class II		
Good	Class IIIs ⁴	Storie Index 60-79	This land has soils with severe limitations that reduce the choice of crops and/or require special conservation practices, but with proper management, rehabilitation, and conservation practices are capable of growing vegetable, fruit and nut crops, and specialty crops that are climatically adaptable to the area.
	Class IIIs ⁵		
	Class IIIw ⁶		
	Class IIIw ⁵		
	Class IIIw ²		
Poor	Class IIIw ¹⁰	Storie Index 20-59	This land has severe limitations which make it most suitable for growing field crops, pasture, and range use.
	Class IIIe ³		
	Class IIIe ⁵		
	Class IV		
Very Poor	Class VI	Storie Index 0-19	This land is suitable only for range and pasture.
	Class VII		
Non-Agricultural	Class VIII	Storie Index 0-19	This land can be utilized for Wildlife, recreation, or watershed.

*Source: U.S. Department of Agriculture Soil Conservation Service Report and General Soil Map, San Joaquin County, California, March 1967.

which constitute prime agricultural land is that economics play no part in their capability to produce. Should a crop raised on these soils become economically unprofitable, the soil has the inherent capability to profitably raise many other kinds of crops.

The California State Legislature in 1965 passed the State Land Conservation Act, more commonly known as the Williamson Act. The criteria for defining prime agricultural land developed in this Act consists of the following:

1. All land which qualifies for rating as Class I or Class II in the Soil Conservation Service Land Use Capability Classifications.
2. Land which qualifies for ratings 80 through 100 in the Storie Index Rating.
3. Land which supports livestock used for the production of food (meat) and fiber (wool), and which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the U.S. Department of Agriculture.
4. Land planted with fruit or nut-bearing trees, vines, bushes or crops which have a non-bearing period of less than five years and during the commercial bearing period will normally return on an annual basis from the production of unprocessed agricultural plant production not less than two hundred dollars per acre.
5. Land which has returned from the production of unprocessed agricultural plant products an annual gross value of not less than two hundred dollars per acre for three of the previous five years.

Practically all of the irrigable land in San Joaquin County would meet at least one of these criteria for defining prime agricultural land.

Because of the dependence on economic considerations as determining factors, the last three criteria of the Williamson Act were considered unacceptable for identification purposes in a 1967 study conducted by the San Joaquin County Planning Department. This study noted that although in any given year as much as two-thirds of the irrigated field crop acreage might gross less than \$200 per acre, when averaged over a three year period, the yields were considerably more than \$200 per acre. Most of this land has the capability of supporting other field or vegetable crops which gross over \$200 per acre, but are not always grown due to normal crop rotation patterns, fluctuating market demands, and other variable factors. Also, with proper treatment, management, or conservation practices, much of this land could be made to support other crops besides field crops.

The problem then was to develop a way to identify the remainder of economically productive agricultural lands such as the Delta and the area between Stockton and Ripon which do not

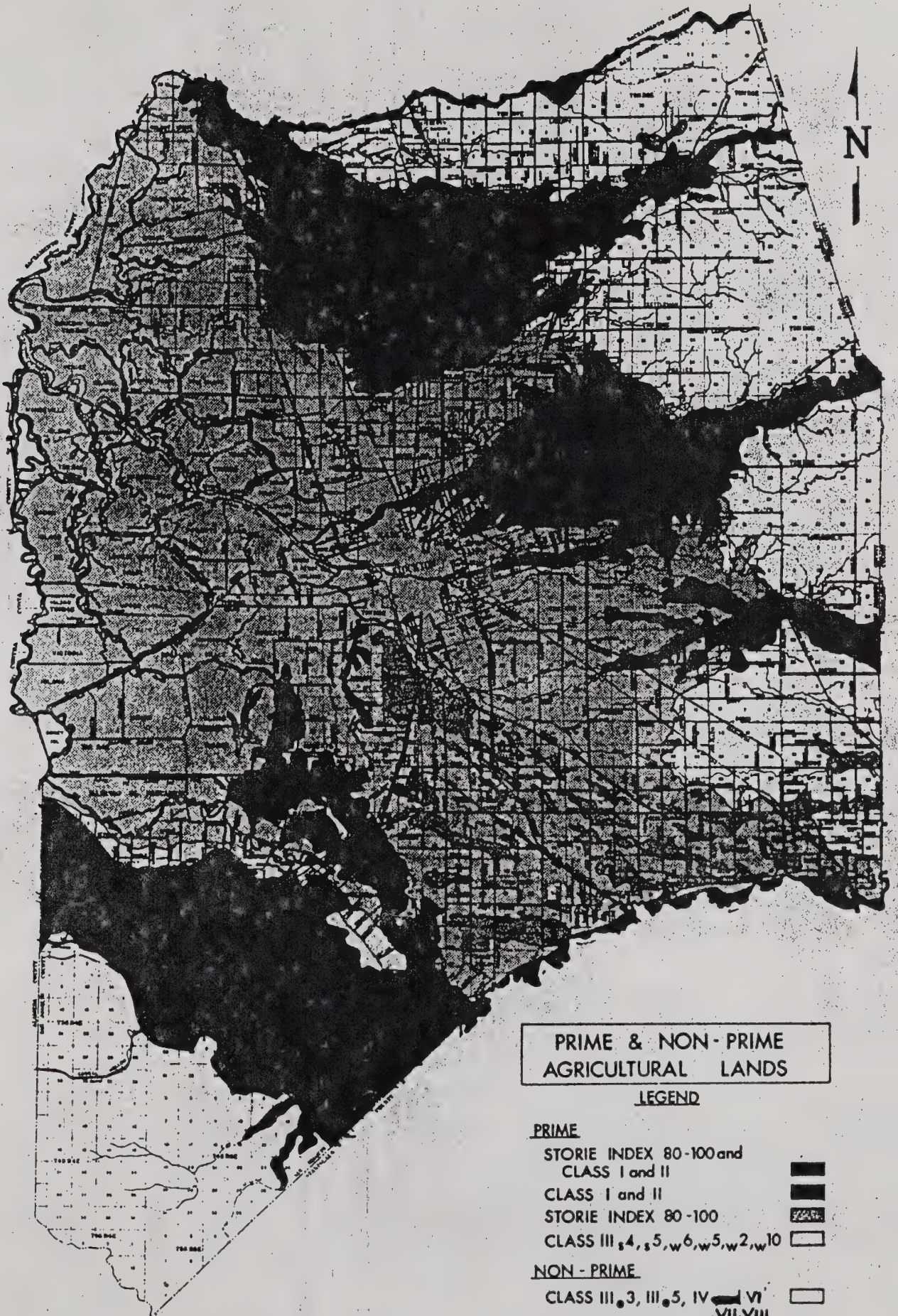
qualify as either Class I or II, or Storie Index 80-100, but have the capability of producing high value crops, such as vegetables, fruits, nuts, or other specialty crops. With the assistance of the Soil Conservation Service, it was determined that six of the eight soil capability units that comprise Class III land are capable, through soil conservation, improvement, and proper management, of supporting vegetable, fruit, and nut crops. Therefore, the following criteria were established to identify prime and non-prime agricultural lands in San Joaquin County (See Map IV and Table II).

The goal in the development of criteria for identifying prime agricultural land was to be as inclusive as possible, to include all land where farming is economically productive and important to the economy of the County. In this regard, it should be noted that in consultation with the U.S. Soil Conservation Service, the University of California Agricultural Extension Service, and the San Joaquin County Agricultural Commissioner's Office, considerable concern was expressed over the inclusion of only the Storie Index soils rated 80-100 in the prime category (3) (4) (5). The consensus was that some soils rated below 80 are better, or potentially better, than others rated above 80. This is possible because of the multiplier effect encountered in the computation of the index. However, it can be assumed that many of these soils also meet the description for Class III soils, and thus are identified as prime agricultural land under the third criterion.

In designating land which should be retained for exclusive agricultural purposes, some areas may be included which have soils whose capabilities do not meet the minimum requirements for prime agricultural land. This is necessary for effective protection of the general area. Thus, within large areas of prime agricultural land small islands of less productive soils may be found. These areas should not be permitted to be used for other than agriculturally related activities.

The recognition that there are relative degrees of soil quality in the County, based upon soil characteristics which determine a particular soil's capability to produce different types and varieties of crops, is the first step required in attempting to protect those soils which are of higher quality than others. The next step is to examine these factors which affect areas where these soils are found.

Over 80% of the total acreage in San Joaquin County can be identified as prime agricultural land according to the criteria established in the preceding section. However, not all of this land can be termed agriculturally productive, since portions are within city limits or otherwise urbanized areas. Other portions in fringe or rural areas are becoming increasingly surrounded by residential development, including isolated subdivisions, as well as scattered commercial and industrial uses, and may no longer be economically viable (See Map V).



PRIME & NON-PRIME
AGRICULTURAL LANDS

LEGEND

PRIME

STORIE INDEX 80-100 and
CLASS I and II

CLASS I and II

STORIE INDEX 80-100

CLASS III, 4, 5, 6, w5, w2, w10

NON-PRIME

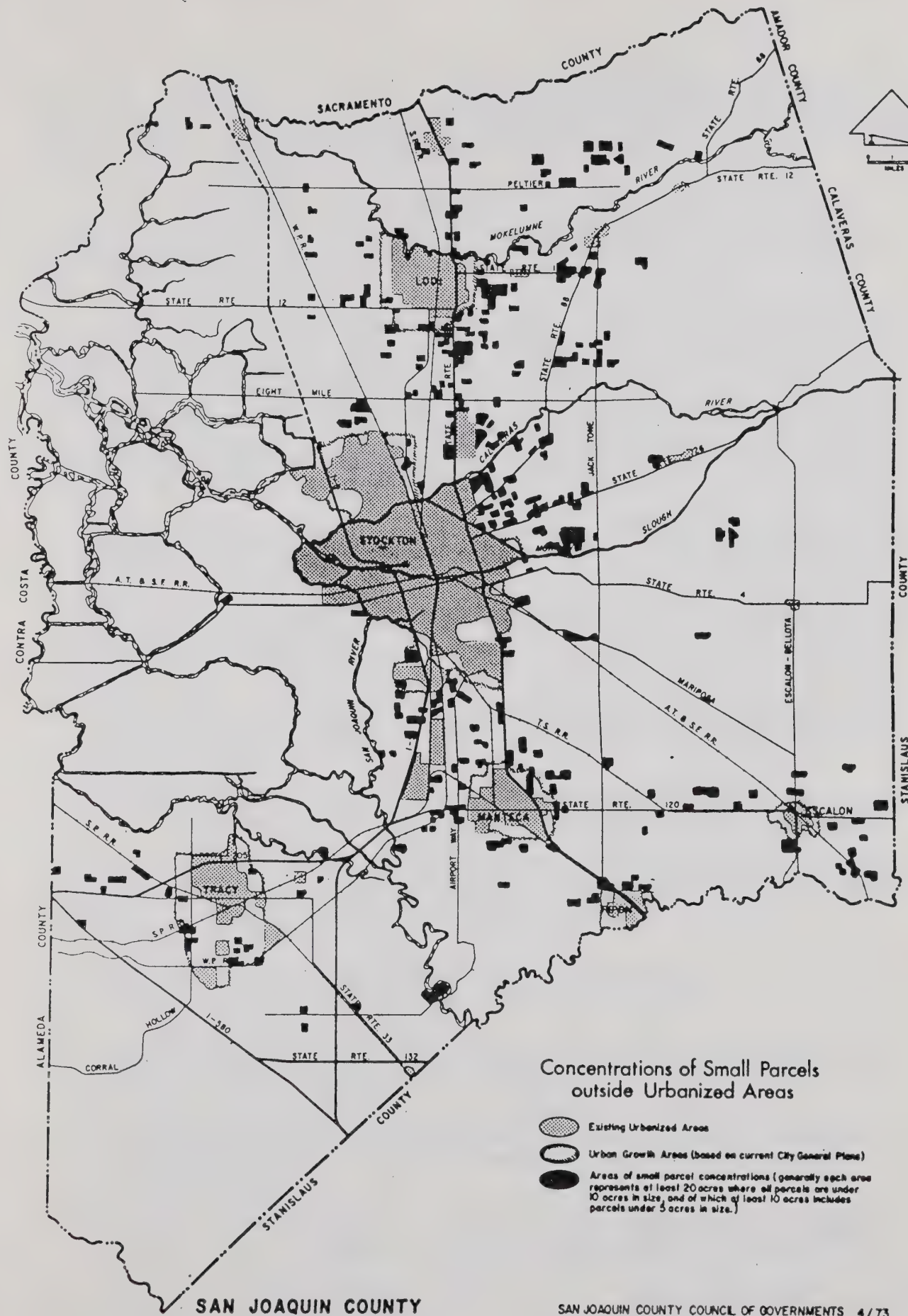
CLASS III, 3, III, 5, IV, VI, VII, VIII

Scale

TABLE II

PRIME AND NONPRIME AGRICULTURAL LAND

Prime Agricultural Land	Nonprime Agricultural Land
1. All land rated 80-100 in the Storie Index Rating System.	1. All land rated as Class III with the capability units of e3 and e5 in the U.S. Soil Conservation Service Land Use Capability Classification.
2. All land rated as Class I and Class II in the U.S. Soil Conservation Service Land Use Capability Classification.	2. All land rated as Class IV, VI, VII and VIII in the U.S. Soil Conservation Service Land Use Capability Classification.
3. All land rated as Class III with the capability units of s4, s5, w5, w6, w2, and w10 in the U.S. Soil Conservation Service Land Use Capability Classification.	



The introduction of non-farm uses into agricultural areas has several important effects. It results in higher assessments in the area due to the increased speculative market values and this means higher taxes for the farmer even though his land remains in agricultural use.

If the intrusion is of a sufficient magnitude, it may also eventually result in the farmer being forced to curtail essential operations, which have since become a nuisance to the surrounding residents.

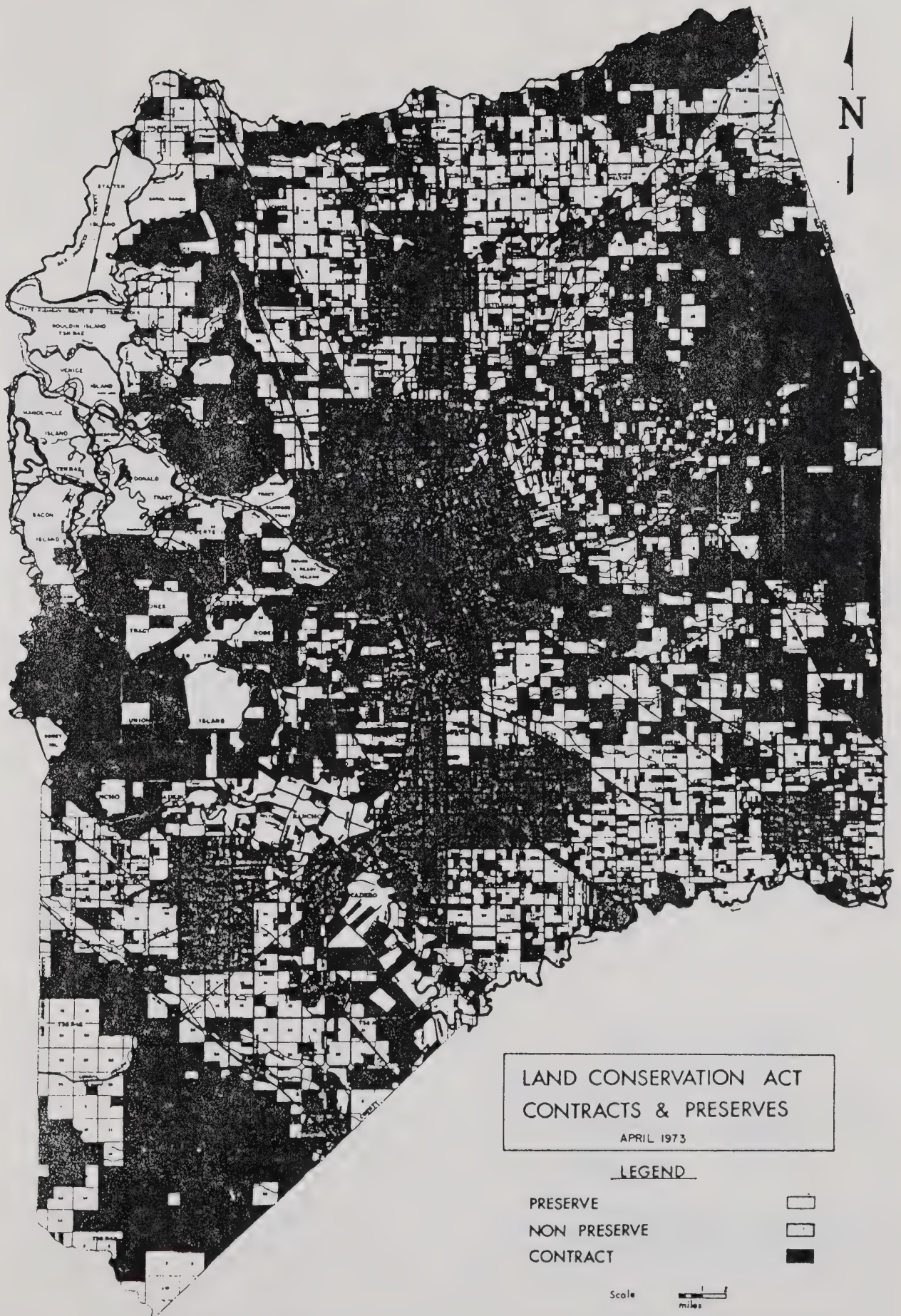
Past policies of urban growth have contributed to the present situation by allowing premature development of urban fringe areas and fostering a process of "fracturization" of rural lands. The present growth pattern represents a continuation of these trends and is presenting a strong threat to the economic viability of the remaining prime agricultural lands. Encroachment into areas of prime agricultural land can be largely attributed to the following factors:

1. The practice of allowing the breakup of many fringe area farmlands into uneconomic agricultural units through the division of land procedure.
2. The liberal interpretation of agricultural zoning by allowing incompatible residential, commercial, and industrial uses.
3. The lack of policies which would promote urban development in an orderly, timed sequence, in accordance with the General Plan.

If these trends persist, the County will continue to witness the deterioration of its soil resources and its economic base.

In an effort to determine which areas designated as prime agricultural land are agriculturally productive or economically viable in view of the above factors, a series of maps were compiled which would:

1. Identify prime agricultural land as defined by the three criteria established in this report (Map IV).
2. Indicate areas of existing urban development and those expected to become urbanized in the future according to current County and City General Plans.
3. Determine those areas of parcel breakups where divisions of land have resulted in concentrations of small parcels (Map V).
4. Identify lands placed in agricultural preserves and under contracts in accordance with the Williamson Act (Map VI).
5. Indicate zoning patterns and types of uses permitted in agricultural zones (Map VII).




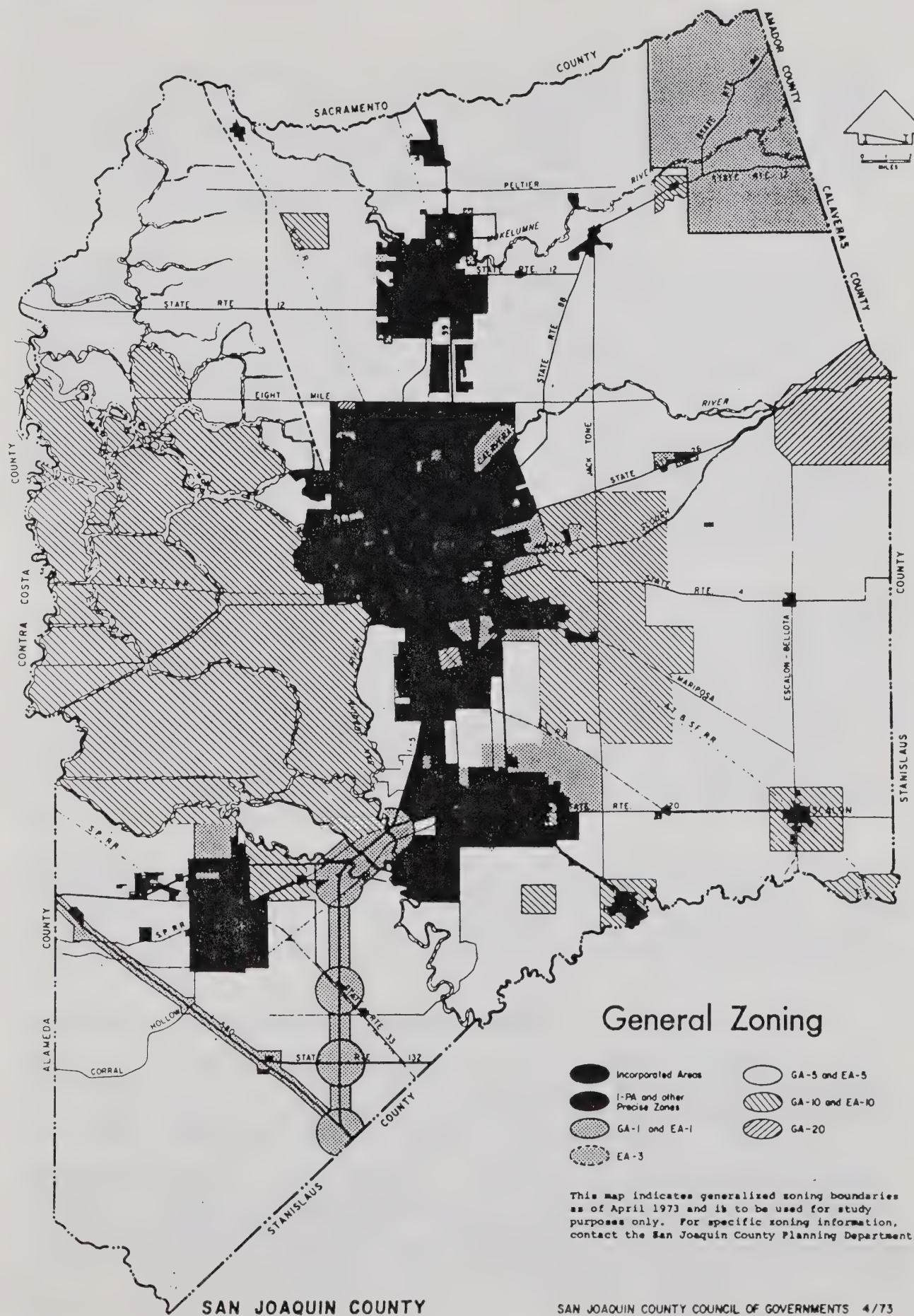
LAND CONSERVATION ACT
CONTRACTS & PRESERVES

APRIL 1973

LEGEND

PRESERVE	
NON PRESERVE	
CONTRACT	

Scale  miles



In the analysis of the information provided by these maps, areas of concern were delineated on the basis of the existing situation. These areas were then examined and evaluated as to the likelihood of their remaining in agricultural production. As a result of this analysis, areas were either designated for preservation in long-term open space use as prime agricultural land, or designated as areas for further study.

Air Quality. Central San Joaquin County is in line with the Carquinez Strait Windbreak. During the summer months the air flows east from the ocean and splits in a northerly direction towards Lodi, and southerly towards Bakersfield, gathering particles from the ground as it moves south. During the winter months the pattern is reversed; however, there is less particulate matter brought north in the winter than what is carried south in the summer. Clear cool nights in the early winter and late autumn precipitate fogs, which can last for days if stagnant atmospheric conditions exist. The San Joaquin Valley, with a high number of sunshine hours, seasonal inversions and frequent absence of wind has the potential for air pollution of greater magnitude than either the Los Angeles or San Francisco Basins, particularly with regard to high oxidant levels.

California has been geographically divided into 12 air basins, and local air pollution control districts have been formed within these areas. The San Joaquin County Air Pollution Control District encompasses the entire County, which is at the northwestern edge of the San Joaquin Valley Air Basin. The district is responsible for regulating stationary pollution sources and monitoring pollutant levels. California has established maximum levels for carbon monoxide, nitrogen dioxides, oxidants and particulate matter. Monitoring stations are located in the downtown areas of Stockton and do not reflect the levels in the entire County of San Joaquin or the Escalon area.

Historic Sites and Landmarks. Sites and landmarks of local, State and National historical significance in San Joaquin County have been identified by the Stockton City Council and San Joaquin County Board of Supervisors. None have been identified in the Escalon area by either the Escalon City Council or the Board of Supervisors.

C. Methods of Preservation and Improvement

General. Outlined below are some of the various methods of conserving natural resources and preserving open space. The physical means will be presented, along with various types of acquisitions and controls, and a review of financing.

Water Resources. The purpose of preserving water resources is to assure a safe, ample supply to meet domestic, agricultural, industrial and other needs. Both ground and surface sources must be considered to meet the continuing and increasing pressure of the expanding population and development throughout the County.

Depending on the capability of a given area for recharge of ground water, it can be replenished by rainwater, surface flows (i.e., rivers, irrigation ditches), and irrigation supplies in excess of the amount consumed by crop production and evaporation. Abandoned gravel pits may be an ideal source if it has not been silted in.

If it is desired to maintain an adequate ground water supply, and recharge areas are located in certain portions of the County (Map I), it is therefore critical to protect those areas providing the recharge to the aquifers. Any type of development that introduces impermeable surfaces in a recharge area is reducing the recharge effectiveness of that area. Policies for restricting incompatible uses in aquifer recharge areas must be developed and implemented if the future ground water supplies of San Joaquin County are to be protected.

Surface supplies are now being used to assure farmers of water throughout the year. These supplies emanate from the reservoirs and other water projects. Some urbanized areas of the County are now negotiating for supplemental surface water to augment their ground water supplies. None has been finalized. The Stanislaus River is one possibility.

Contamination of the water supplies exist in many ways. Through a process of contamination source identification, various steps may be taken to reduce or abate the problem. Each case will require its own method.

Flood Hazards. Floods vary in size, area inundated, suddenness, duration, and frequency, in accord with certain natural and man-made conditions. Factors influencing flooding are summarized in Table III.

Floods are costly for private individuals and for the public. Methods of reducing flood damage are summarized in Table IV. In order to effectively reduce damage a combination of these methods should be used.

The City of Escalante nor San Joaquin County presently have any flood plain zoning ordinance or any legal program prescribing protective restrictions on flood hazard areas. The only information on flood hazard areas required to be given to the public is the delineation of presently defined flood prone areas on subdivision maps which must be shown to prospective homeowners.

For proposed projects in specific locations, the approving local jurisdiction can request a flood hazard report from the U.S. Army Corps of Engineers. The Corps will give the likelihood of flooding and the anticipated water depth for the designated flood. The "designated flood" is usually a 100-year flood. If the Corps report indicates water of 2 or 3 feet the project may be conditioned to require floodproofing so that a flood would cause little damage to the project.

TABLE III

FACTORS INFLUENCING FLOODING

NATURAL	MAN-MADE
accumulated snow and its moisture content	land uses
rate of snowmelt	changes in drainage
temperature	reservoir capacity
amount, timing, and duration of rains	reservoir releases
month of the year	changes in watercourses
topography	paving of surface areas
soils and geology	
drainage patterns	
sediment deposition	
capacities of watercourses	

TABLE IV

METHODS TO REDUCE FLOOD DAMAGE

CONTROL OF THE WATER	CONTROL OF THE LAND	OTHER
reservoirs	flood plain zoning	floodproofing
levees or flood walls	building codes	evacuation
channel improvement	subdivision regulations	urban redevelopment
bypasses or diversions	development policies	flood insurance
watershed management	health regulations	warning signs
	open space maintenance	tax adjustments

When flood areas are officially designated, specific standards for each type of flood hazard area will be established. Although no definite flood hazard areas have been delineated as yet, the U.S. Army Corps of Engineers is presently conducting a study to determine the 100-year flood plains in the County. Upon receipt of this information and an analysis of the capabilities of the present flood control facilities in relation to a 100-year flood, precise areas will be established as flood hazard areas.

With these areas designated, flood plain zoning can be established applying to each area specific restrictions on types of use and structure. The building code and subdivision regulations should provide for floodproofing, establishing proper elevations for structures, utility lines, and roadways and prohibiting equipment that might be hazardous to life when submerged.

Vegetative Resources. There is a dispute between agencies whether vegetation along flood control channels, irrigation and drainage ditches, and roadsides should be removed or maintained. Removal is being done by clearing, burning or chemical applications. However, landowners have become increasingly aware of the value of this vegetation as habitat, and some landowners are now planting areas previously stripped.

The State, for several years, has been doing a study of the feasibility of retaining vegetation on levees. The United States Army Corps of Engineers has recognized the desirability of retaining vegetation, but they are still stripping and riprapping the levees. Since maintenance of vegetated levees is more difficult and costly, most agencies which are responsible for levee maintenance remove the vegetation and use riprap. Should this policy be stopped, it is likely that the vegetation would quickly return. (There is still a dispute as to whether vegetation or riprap more effectively prevents erosion of the levee).

Habitat has also been removed by excavators of sand and gravel and urban developers. Excavations require permits from the local governmental agency. Environmental Impact Reports, necessary if a project may have a significant effect on the environment, help in making developers aware of the need for preserving habitat. In areas of valuable vegetation, most developers are willing to retain habitat, finding removal can be poor public relations.

Fisheries. Fisheries are affected by many factors, including: disruption of flows and currents; changes in water depth, force, velocity, temperature, salinity, chemical makeup, sedimentation; diversions or blockages in migratory waters; inadequate spawning grounds, cover, habitat, food supplies and fish management; waterway development and certain uses (recreational and commercial); introduction of adverse fish species; toxic wastes, and various other pollutants, particularly sewage.

Overhanging vegetation and snags are important to fish. This vegetation provides sheltered resting areas and shade. Insects that fall from this vegetation are an important food source.

Controlling these factors that affect fisheries are many. Positive results have been through the State Department of Fish and Game in their preservation and propagation programs. Assuring a clean ample supply of water is necessary. And for the public, access points are necessary.

Wildlife. The key to the preservation, maintenance, or enhancement of wildlife species is directly dependent upon the condition and extent of its habitat. The preservation means for vegetation and water resources will therefore directly influence wildlife preservation.

Minerals. Essential as the industry is to the economic well being and growth of an area the industry is regarded or viewed by the general public as a nuisance. The following are the most objectionable characteristics of the industry and produce the greatest conflict between the industry and the community: Noise is generated by extraction, processing and transporting equipment; dust comes from dry screen separation processes, vehicles moving on unpaved roads, and spilled material on paved roads. Plants manufacturing oil base plant mix for asphaltic paving emit obnoxious odors and release minute asphaltic particles into the atmosphere. Stream waters may become muddy and polluted, or the water course altered and there is operational wastewater. Storage areas, structures, machinery, and stripped and pitted stream courses and countryside are often unsightly; while heavy equipment, settling ponds, and excavations both during and after abandonment can be health and safety hazards. Water quality and supplies can be endangered; erosion is a hazard; and the land is often left in an unusable state.

Scarred landscapes are primarily a result of past excavation. Greater controls are placed on present operations and excavators feel a stronger responsibility to control operations and rehabilitate sites. Spawning gravels for migratory fish, and spawning materials for resident fish, have been disturbed in the past by excavation, being entirely removed in some cases.

Because of limited supplies and prohibitive transportation costs, deposits close to expanding areas must be utilized to the fullest extent possible. Deposits should remain accessible for economic extraction and noncompatible uses prohibited near these areas or possible future excavation sites. Preventing extraction of deposits and dwindling supplies results in rising costs to the consumer.

There are several methods of controlling surface mining operations, all derived from the police power delegated by the State to local governments; comprehensive grading and extractive ordinance, zoning and special use permits. Also, codes ordinances, and laws of various governmental branches and boards exercise varying measures of legal restraint. The Local Health

District controls plant emissions and health and safety problems. Preparation of Environmental Impact Reports on specific projects and their subsequent review places greater controls on problems created by the industry.

Soils. Preservation of soils primarily relates to the preservation of agricultural lands. The general plan shows those areas which the local government adopting the plan will attempt to control the uses of land. The Zoning Ordinance and the Land Conservation Act are two tools used to implement the general plan in a controlled fashion.

The policies of the general plan are official statements which seek solutions to land use issues through their implementation. In the County Plan, the importance of agriculture to San Joaquin County, issues involving urban encroachment, and the protection of agricultural land have been recognized in the past and policy statements on these issues were included. These adopted policy statements provide the County's advisory and legislative bodies with a basis for decision making. Similarly, City adopted policy would apply to decision making by City advisory and legislative bodies. In making decisions on development upon agricultural land, the General Plan Policies should be stated and used to evaluate the proposal. If the Plan policies are not used to guide decisions on urban development upon prime agricultural land, soils of high quality will be lost and the land use issues which the General Plan attempts to resolve will be allowed to continue.

Zoning through districts where only compatible uses of land are permitted and adopted in conformity to the General Plan is an effective device available to protect agricultural land by not allowing non-farm uses. Incompatible non-farm uses, such as commercial, industrial, and urban-sized residential parcels created by division of land procedures, have located in prime agricultural areas due to unrestricted interim zoning. The County has recognized this problem in the Escalon area and basically has zoned the surrounding area with general agriculture, 10 acre minimum parcel size. See Map VII for general zoning. Although the City does not have direct control or veto power over zoning matters outside the City, present County policy does allow the cities in the County to submit recommendations to the advisory and legislative bodies of the County on matters affecting outside city land within three miles of the City limits.

The California Land Conservation Act of 1965 (Williamson Act) was designed to: 1) protect the State's prime agricultural lands and thereby maintain an important element of the State's economy; 2) encourage orderly growth and, thereby, minimize the high cost of community services characteristic of areas of disorderly growth; and 3) encourage the conservation of farm and grazing land as an "open space" asset. The Act itself establishes the basic policies governing and guiding the establishment of agricultural preserves and the process by which the County may enter into bi-lateral legal agreements with property owners to conserve agricultural land for agricultural use.

The basic provisions of this land conservation program may be summarized as follows:

1. Agricultural land to be included in the conservation program must first be designated as an agricultural preserve by the Board of Supervisors.
2. Land within the preserve may be restricted to agricultural uses and uses compatible with agriculture by means of contracts between the owner and the County.
3. Scenic and open space areas not suitable for agriculture may be restricted to non-urban development by means of scenic easements granted to the County by the owner.
4. Land subject to enforceable restrictions, as defined by the Revenue and Taxation Code, may be assessed only on the basis of its value for those uses permitted by law, and sales data are not to be used when valuing the land.

Although the Land Conservation Act is not specifically a tax system reform measure, it does provide for tax relief for agricultural land. Tax adjustment measures are necessary to reduce economic pressure on owners and permit them to keep their land in agricultural use rather than convert it to other uses prematurely. Also, the possibility of tax relief serves as the incentive necessary to encourage voluntary participation of owners in the program.

The Williamson Act has been implemented in San Joaquin County. Map VI shows those lands declared a preserve and those under contract. Those contracts being considered within one mile of the City limits come before the City Council for action. The policy has been adopted to protest all contracts in order that the City can negotiate its own contract should the land come into the City during the life of the contract with the County.

Air Quality. The San Joaquin County Air Pollution Control District has established rules and regulations governing stationary sources of air pollution in the County. Pollution control devices are required for industries, and agricultural burning is permitted with a permit only on "burn" days, when atmospheric conditions are favorable. These days are designated by the State Air Resources Board, based on daily monitored conditions.

Vehicle emissions are regulated by the State.

Historical Resources. The Board of Supervisors in San Joaquin County has established a Historical Sites Committee to select for preservation those sites and structures representative of the cultural history of the County. After investigation and review of these sites, County designation is subject to the approval of the County Board of Supervisors. A similar procedure exists for the City of Stockton.

These landmarks or sites that have been approved by the local governing body and meet other established criteria are eligible for application to the State Historical Landmarks Advisory Committee for designation as a State Historical Landmark or Point of Historical Interest.

There are a number of problems involved in attempting to designate historical sites and landmarks. Official designation of some existing sites or landmarks entailing State restoration and maintenance codes is often prevented by reluctant property owners, or unrecognized structures have been neglected and are reaching deterioration stages beyond repair. Commercial, industrial and various residential land uses are priority concerns leading to the demolition of historic buildings.

Acquisition and Control Means. Full fee interest in land for open space and/or conservation preservation may be acquired by purchase, through gifts, or by the process of eminent domain.

1. Purchase and use by a public jurisdiction.
2. Purchase - leaseback. Land is purchased by a public jurisdiction and leased back to the original owner or another party for uses compatible to open space objectives under conditions that may be stipulated by the public body.

Variations could allow where appropriate, leases for specific lengths of time or in life estate to the original owner.

3. Purchase - saleback. Land is purchased by a public jurisdiction and resold to either the original owner or a third party with certain covenant or less certain rights, such as development rights.

Interests that are less than the entire fee simple in land include easements, leases, rights-of-entry, covenants running with the land, and other "development rights", a term commonly used to indicate a broad range of less-than-fee interests. The purposes of the acquisition of development rights rather than of the entire fee interest are to lower the costs of acquisition, keep the land on the tax rolls, permit land to remain in productive use, and retain efficiency of private management.

1. Development rights. The rights to develop the land to intensive uses are acquired by a public jurisdiction. The land and its use for other purposes remain in private ownership.
2. Scenic or conservation easements. The right to control land to a degree over and above what may be allowable through police powers is acquired by a public jurisdiction.

A wide assortment of tax inducements, involving preferential assessments, tax exemptions, tax deferrals and other devices are currently in use in several states. The method of tax inducement utilized in California is the Land Conservation Act (Williamson Act) of 1965. The use of tax inducements to date can best be looked upon as a temporary holding action, subsidized by urban

taxpayers with no promise of permanency for the future use.

1. Tax Concessions. Taxes on lands serving open space and conservation needs are deferred or abolished in return for assurances that the land will be maintained in its open state.
2. Differential assessments. Lands are assessed for their productive value instead of potential uses, e.g. "highest and best use."

The county and cities under their police powers can control the use that people make of their property. However, the Constitution prohibits governing bodies from depriving people of their property without due process of law. The dividing line between regulation and taking is imprecise. Regulatory schemes thus suffer the risk of being declared void as an unconstitutional taking of property. The regulatory schemes, be they zoning or taxation, also suffer from the fact that the restrictions are legislative and not incorporated into the legal title of the land. Thus they have little permanence and can be altered or abandoned at the discretion of the Legislature.

1. Zoning. The basic "use" and "density" designation plus "scenic conservation" and "special regulation" combining districts where appropriate.
2. Other statutes and ordinances concerned or related to conservation--health regulations, grading ordinances, pollution control laws, etc.

Methods of Financing. The high cost of acquiring land is usually considered one of the biggest barriers to preserving open space land. While methods cheaper than full purchase are available, some of them, such as the purchase of development rights and easements, can also be costly. These methods, and those of zoning and the granting of tax benefits to preserve open space, typically give the governing agency less control over development. Only full acquisition can assure that 30 years in the future open space will remain completely open.

Recent studies have suggested that in some cases the cost of retaining land as open space may be less than the cost of development. Savings in utility and service costs may offset the cost of open space acquisition.

Since both full acquisition and less-than-fee acquisition are likely to be quite costly, methods other than use of the property tax might be tapped:

1. Sale of Delinquent Property. The County or Cities could place all revenue from the sale of excess and tax delinquent property into a special park purchase and improvement fund.
2. Subdivision Park Dedication Funds. Where a developer subdivides land not particularly suitable for parks, or where sufficient park space exists nearby, the County or Cities

might require payment of fees, deposited in a special fund, to be devoted to park purchase.

3. User Fees and User Taxes. For certain intensively developed facilities, user fees and taxes may pay for a portion of the development costs.
4. Leasing. The County or Cities might derive revenue from purchased properties.
5. Motel "Bed Tax". One of the primary additional sources of funds for park, recreation and open space programs should come from revenues derived from the Motel Tax. Steadily increasing substantial funds can be expected from this source. A systematic approach to capital expenditures should be formulated for maximum effectiveness.

Alternate tax sources may also be used to obtain funds for conservation and open space purposes.

1. Real Estate Transfer Tax. Charged when real estate changes hands. This tax might have the additional benefit of discouraging land speculation.
2. Gasoline Tax. Portions of this fund may be used for landscaping along scenic highways.

Various Federal funds have been made available to state and local governments for conservation and open space purposes. The Catalog of Federal Domestic Assistance gives a comprehensive listing and description of Federal programs and activities which provide assistance or benefits. The catalog is an aid in identifying and obtaining available assistance. Competition for grants is stiff, and funding fluctuates with the national economy. These programs should not be counted on in implementing the entire conservation and open space program.

A recent source of income available to states and local government from the Federal Government is the Local Fiscal Assistance Act of 1972, commonly known as General Revenue Sharing. Part of the Act's objective is to let state and local government determine open space and conservation needs and financing it with these funds.

Private funds must also be considered in implementing a program. A number of private conservation groups might be receptive to well designed specific city proposals.

III

ASSUMPTIONS OF THE OPEN SPACE ELEMENT

The following are characteristics of the future development of the Escalon area arrived at by consensus without substantiating information and which will supposedly occur during the planning period.

1. That economic activity and population will increase significantly in the future.
2. That people want and need open space and conservation of natural resources.
3. That agriculture and agriculturally dependent industries will continue to be a major and essential economic activity.
4. There is a finite amount of natural resources present.
5. That there will be increased leisure time which will result in increased demands for new and expanded educational and recreational facilities.
6. That continued population and economic growth will cause increasing pressures for development on agricultural land and on other open areas and utilization of natural resources.
7. That there will be increased application of comprehensive federal, state, and regional programs to deal with the problems of air, water, solid waste, land use, other natural resources, and population growth in an integrated manner.
8. Historical sites and landmarks are important to future generations.
9. Community awareness of environmental values will increase and put increasing pressures on government to respond.

IV

STATEMENT OF DEVELOPMENT POLICIES

A. Objectives

General.

1. To stimulate the creation and maintenance of balanced land uses so as to enhance the present and future environment in the Escalon area.
2. To give priority for acquisition and/or preservation to those areas with conservation assets.
3. To promote an understanding of the need to preserve, enhance and protect our natural resources and encourage their wise management, proper development and re-use for the enjoyment and use by present and future generations.

Water Resources.

1. To insure sufficient water supplies of good quality for all beneficial uses.
2. To conserve ground water resources and prevent overdraft of existing ground water supplies.
3. To preserve, enhance and protect the watershed or ground water recharge areas.
4. To insure flows of adequate quantity and quality in the waterways to provide needed surface water supplies and to protect the fisheries.

Flood Hazards.

1. To protect life and property from flood damage.
2. To assure the adequate development and maintenance of flood control projects for maximum protection with no or minimum destruction of other resources such as habitat, fisheries or scenic natural beauty.

Vegetative Resources.

1. To preserve vegetation for erosion prevention, cover, shade and maintenance of visual landscape.
2. To protect and enhance natural vegetation for the preservation of species and fulfillment of aesthetic, recreational, educational, and economic needs of present and future residents and visitors.

Fisheries.

1. To preserve, enhance and protect fish resources and habitat.
2. To make people aware of fisheries and their recreational and commercial importance.

Wildlife.

1. To protect and enhance wildlife for the preservation of species and fulfillment of aesthetic, recreational, educational and economic needs of present and future residents and visitors.
2. To prevent destruction of, and encourage, wildlife habitat, particularly riparian habitat.

Minerals.

1. To insure that extractors of natural resources take all precautions to prevent accidents and minimize nuisance factors which are a result of their operations.
2. To ensure continuing, prompt and complete rehabilitation of extraction or exploratory sites.
3. To ensure that extractive resource deposits will be accessible when extraction becomes necessary.
4. To protect other natural resources from damage as a result of resource extraction and prevent incompatible land uses.

Soils and Agricultural Lands.

1. To conserve soil resources to provide a continuing base for agricultural productivity and the County's economy.
2. To preserve in agriculture those soils capable of producing a wide variety of valuable crops.
3. To direct urban expansion toward vacant or underused urban land and extend contiguous development toward the less productive lands in order to minimize disruption to viable agricultural areas.

Air Quality

1. To maintain air quality at a reasonable level which will protect public health, and agricultural crops and livestock.

Historical Resources.

1. To ensure protection of sites and landmarks of historical value for the education and appreciation of present and future generations.
2. To provide information on recognized historical sites and landmarks of public interest.

B. Guiding Principles

General. The citizens of the Escalon area look upon their community toward enhancing the present and future environment to maintain a more desirable place for a family to live, work and play. To this end, the following principles are stated to guide the program of planning action by the City of Escalon which will be needed to fulfill the objectives desired by the citizens. General principles that will apply to all conservation and open space programs include:

1. Encourage a continuing program to provide information on the area's natural resources.
2. Promote programs to encourage respect for the environment.
3. Prevent by all possible means the pollution of any natural areas and resources. Continue investigation of mechanism for the protection of open space.
4. Develop means of maintenance and/or re-establishment of valuable natural areas by tax or other incentives, easements, gifts and methods other than acquisition of fee title.

Water Resources.

1. Prohibit urban development in areas shown as substantial aquifer recharge (Map I) in order to keep these areas open so that the ground water may be replenished.
2. Guide urban development toward areas where little or no aquifer recharge occurs.
3. Support well-monitoring programs which indicate ground water problem areas.
4. Work toward the enforcement of all existing water quality standards and support further investigations of the effects of water contaminants.
5. Support coordinated negotiations for additional surface water supplies for the County.
6. Work toward the elimination of harmful discharges into the waterways.
7. Prevent the destruction of wildlife habitat and fisheries in the obtainment of additional water supplies.

Flood Hazards.

1. Request determination of 50-year and 100-year flood plains in the County.
2. Request a flood hazard report from the U.S. Army Corps of Engineers for any project in an area of potential flooding.

3. Establish restricted flood plain zoning as soon as definite flood plains have been designated to limit and control development and protect both the private and public interest.
4. Inform the public of the flood hazards in San Joaquin County.
5. Discourage urbanization in areas not protected from 100-year floods.

Wildlife and Vegetation.

1. Coordinate the development of a program to maintain vegetation on levees without losing the integrity of the levees for flood control.
2. Require consideration of wildlife, habitat, and natural vegetation in publicly funded projects, such as highways, bridges, flood control and facilities. Encourage private organizations and individuals to take an active role in promoting and preserving wildlife, vegetation and habitat.
3. Support and promote sound programs of wildlife and vegetation management and those programs that encourage and teach respect of the environment.
4. Support programs that would provide maximum opportunity for everyone to use and enjoy fish and wildlife and vegetative resources.
5. Encourage landowners to maintain natural vegetation along roads, fencelines, drainage and irrigation ditches and on unused or marginal land. Encourage development of means to maintain and/or re-establish valuable natural areas, by tax or other incentives, easements, dedications and methods other than acquisition of fee title.
6. Promote retention and development of wildlife habitat and "natural" areas in new subdivisions and developments.
7. Support the development of a model ordinance for tree protection for adoption by the cities and County and encourage new tree planting.
8. Encourage prudent weed and pest control practices by local agencies.

Fisheries.

1. Promote programs to maintain vegetation along waterways including the Stanislaus River as cover for fish and to maintain water temperatures adequate for survival and spawning.
2. Support Department of Fish and Game programs to enhance the County's fisheries.

3. Require agencies controlling dam releases to provide constant sufficient flows in the rivers in order to maintain good spawning grounds and fisheries.
4. Support acquisition or attainment, retention and maintenance of fishing access points for the public.
5. Prevent, by all possible means, the pollution of fisheries and waterways and support reasonable regulatory action by the Regional Water Quality Control Board, State Water Resources Control Board, and other regulatory agencies.
6. Control or prohibit projects or activities that might disturb anadromous fish during periods of migration and spawning.
7. Require restoration and replacement of spawning gravels in all rivers, especially the Stanislaus River, and prohibition of excavations that endanger fisheries.
8. Encourage establishment and maintenance of fisheries and habitat in and along all San Joaquin County waterways where feasible, including sloughs, creeks, and future lakes, ponds, and waterways.
9. Require construction or other disruptive activities in or along channels to be properly timed so as to avoid disruption of seasonal fish migrations.

Minerals.

1. Request a survey by the California Division of Mines and Geology to identify extractive resource areas.
2. Request placement of all areas of known aggregate deposits and excavations in the County under protective zoning or other measures to ensure access.
3. Require strict enforcement of those rules and regulations covering excavations. Site rehabilitation bonds should be mandatory and regulations should be updated whenever conditions warrant.
4. Encourage public, and private agencies and individuals to develop practical, economical and innovative uses for depleted or abandoned excavation sites.
5. Require complete reclamation of borrow sites immediately after their depletion or abandonment and discourage them in areas where they might endanger fisheries, wildlife habitat or designated conservation sites.
6. Prohibit extraction in areas where fisheries, wildlife habitat, archaeocological sites, historic sites, other important resources or areas of significant beauty might be endangered.

Soils and Agricultural Lands.

1. Promote the protection of agriculture and agriculturally oriented activities from development practices that erode their economic viability.
2. Restrict further fragmentation of prime agricultural land to areas designated for urban or residential development.
3. Establish protective zoning for agricultural lands by prohibiting residential, commercial, industrial or other urban development.
4. Promote increase minimum parcel sizes in agricultural zones consistent with acreages necessary to maintain economic viability considering the normal cropping patterns.
5. Guide future urban development toward vacant or underused urban land and direct necessary expansion of urban centers toward the less agriculturally productive lands.
6. Support continued implementation of the Land Conservation Act of 1965 by encouraging the establishment of contracts with agricultural preserves.
7. Discourage the establishment of municipal-type public services in conjunction with residential development in rural areas.
8. Encourage the use of vacant and underused land within the urban center.
9. Support an educational program designed to promote agricultural land as being unexpedable due to necessity of food production, economy of the area and open space.
10. Support allowable compatible uses incidental and complementary to agricultural uses of ranch properties.

Air Quality.

1. Support a realistic monitoring program measuring the quality of air in the rural areas.
2. Support a continuing program of regulatory measures and legal enforcements with regard to minimizing or preventing air pollution in the County.
3. Encourage plantings and retention of vegetation which requires minimum maintenance and no burn off on all properties, especially along roads, waterways and in high pollution areas.
4. Encourage comprehensive land use planning as a means of minimizing driving miles and resultant emissions, and controlling land uses in the County that may be detrimental to air quality.

Historical Resources

1. Support activities of individuals and historic preservation groups in the selection and designation of those sites and landmarks of public interest.
2. Prevent the further deterioration of known existing landmarks through support of restoration programs.

C. Standards

Standards for park development have been adopted in the Recreation Element of this plan. There are no other known standards to use for open space or conservation purposes.

D. Plan Proposal.

General. The planned proposal is the implementation of programs to achieve the objectives. These are the actions to be taken by the City Council, the Planning Commission and the City staff.

General Plan Elements Preparation

1. Prepare a Scenic Highway Element
2. Prepare a Safety Element

Ordinance Adoption

1. Develop a tree protection section for the proposed tree ordinance.
2. Provide for open-space zones in the revision of the zoning and subdivision ordinances.
3. Prepare and adopt an open space zoning ordinance as required by Section 65910 of the Government Code.

Studies and Reports

1. Continue the study of methods of preserving of areas with conservation assets and prepare reports of findings.
2. Continue the analysis of means of replenishing underground water supplies and the study of reuse of waste water.
3. Participate in a study of a means to mitigate environmental damage from construction or structural uses.
4. Develop standards, considering the ecological factors, for the regulation of excavation and maintenance of waterways.
5. Analyze present procedures for notifying the public of pertinent meetings and information and determine methods to improve the flow of information.

Providing Information to the Public

1. Provide information and prepare reports relating to the Escalon area's natural resources.
2. Provide information and join in the sponsoring of educational programs designed to promote an understanding of the value of agricultural lands for food production and open space.
3. Provide information on the advantages to the public of keeping urban development contiguous to existing urban centers to avoid conflict with agricultural uses.
4. Prepare information for distribution on alternative and compatible uses incidental and complementary to agricultural land uses.
5. Participate in programs that encourage and teach respect for the environment.
6. Publicize other environmental information that is of public interest and importance.

Coordination With Other Public Agencies

1. Participate in an annual review with the cities and the county, the overall effects of the Land Conservation Preserves and Contracts in San Joaquin County.
2. Participate in the development of compatible open-space zoning.
3. Participate along with other governmental jurisdictions, ecology and other community groups to develop a voluntary control organization to assist in educating trail users and supervising trails and nature study areas.
4. Participate with the Stanislaus Area Association of Governments and Stanislaus County in the preservation of the Stanislaus River for fisheries and wildlife habitat.
5. Participate in the establishment of policies for rural residential land use.
6. Participate in the development of flood plain zoning by the County.
7. Participate in the support of the construction of the New Melones Dam on the Stanislaus River.
8. Support legislation giving cities greater control on land use decisions in those areas of their sphere of influence.

THE CONSERVATION ELEMENT MAP

The Conservation Map indicates broad areas which should be maintained for open space and conservation purposes and at the same time recognizes existing urbanized areas along with areas which will be needed for future growth. The delineation of each area is based on the objectives, findings, and recommendations in this Element. Policies for urban growth and development and recommendations for the preservation of agricultural land and the conservation of natural resources are found in each section of the Element and in the work program. In order to maintain the areas shown on the Conservation Map, the recommendations and policies of the Element must be followed by the San Joaquin County Council of Governments and other governmental agencies in the County.

The Map distinguishes the following areas: Existing Urbanized, Urban Growth, Intensive Agriculture, Extensive Agriculture, and Conservation. Several areas need further investigation to determine the most appropriate designation; these areas are identified as Study Areas on the map.

EXISTING URBANIZED AREAS

These areas consist of cities and adjacent developed portions in the County as well as other communities designated as urban or rural centers in the General Plan for San Joaquin County.

URBAN GROWTH AREAS

These areas essentially coincide with the general plans adopted by the individual cities, the majority of which extend over twenty years to 1990 or 1995.

INTENSIVE AGRICULTURAL AREAS

Intensive irrigation practices in these areas of high quality soils have resulted in highly successful agricultural production. These areas should be preserved as prime agricultural land. Not included are large areas where the land has been divided to the extent that the parcels can not be considered economically viable units for agricultural production.

Commercial farming is adversely affected by land divisions and urban encroachment. Further divisions of land into small parcels should occur only in designated urban growth or rural residential areas.

EXTENSIVE AGRICULTURAL AREAS

These areas contain poorer quality soils, which in combination with the lack of irrigation systems cannot generally be considered as prime agricultural land. However, several areas are capable, if irrigation is practiced, of profitably growing certain crops. In addition, range and irrigated pastures support livestock and poultry production, which is an important segment of the County's agricultural economy. The impact of any proposed urban or recreation-oriented development should be carefully considered.

STUDY AREAS

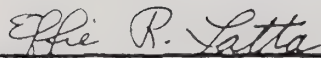
Certain areas require further study to determine if they should be designated for urban growth, rural residential, or agriculture. In general they are located near existing urban or rural residential development. They have been selected for further study because of existing, but scattered small parcels, indicating a fragmentation of viable agricultural land. In many cases existing zoning permits parcels of one acre or less. Therefore, if these areas are to remain in agriculture, they should be rezoned as soon as possible and owners encouraged to enter into contracts under the provisions of the Williamson Act.


CONSERVATION AREAS

All of the following have been designated as conservation areas: areas of substantial aquifer recharge, flood plains, excellent wildlife habitat, sand and gravel deposits, and regional parks (existing and proposed). Agriculture and outdoor recreation are usually compatible uses in these areas, with the possible exception of areas around sand and gravel excavations.

Adopted by Resolution No. 74-1 of the Escalon City Planning Commission, this 14th day of January, 1974.

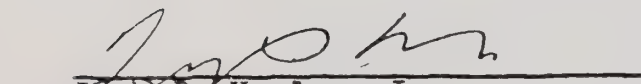
ATTEST:

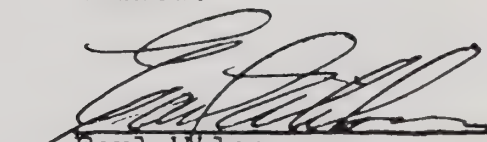

Effie Latta
Chairman


Earl Wilson
Secretary

Adopted by Resolution No. 355 of the Escalon City Council this 19th day of February, 1974.

ATTEST:


Jack P. Hanlon, Jr.
Mayor


Earl Wilson
City Clerk

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RESOLUTION NO. 74-1

A RESOLUTION OF THE ESCALON CITY PLANNING COMMISSION
RECOMMENDING APPROVAL OF THE CONSERVATION AND OPEN
SPACE ELEMENT OF THE ESCALON GENERAL PLAN.

WHEREAS, The Escalon City Planning Commission has studied and prepared the Proposed Conservation and Open Space Element of the General Plan for the City of Escalon; and

WHEREAS, a public hearing for the purpose of allowing all persons to be heard for or against the Proposed Conservation and Open Space Element was set for the 14th day of January, 1974 at 7:30 P.M., and notice of said hearing was duly published the 2nd day of January, 1974 in the Escalon Times; and

WHEREAS, The Planning Commission has considered said Proposed Conservation and Open Space Element.

NOW, THEREFORE, BE IT RESOLVED BY THE ESCALON CITY PLANNING COMMISSION, as follows:

1. The Planning Commission has found the Proposed Conservation and Open Space Element is suitable for the Conservation and Open Space needs for the controlled development of the City of Escalon, and does hereby recommend to the City Council of the City of Escalon the adoption of the Proposed Conservation and Open Space Element.

2. That a certified copy of this resolution be forwarded to the City Council of the City of Escalon by the Planning Commission Secretary as the report of the Planning Commission.

Passed and adopted this 14th day of January, 1974.

AYES: Commissioners: Blixt, DeBie, Miller, Stewart and Chairman Latta.

NOES: Commissioners: None.

ABSENT: Commissioners: None.

/s/ Effie Latta
Chairman, Escalon City
Planning Commission

ATTEST:

/s/ Earl Wilson
Secretary, Escalon City
Planning Commission

RESOLUTION NO. 355

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ESCALON ADOPTING THE CONSERVATION AND OPEN SPACE ELEMENT OF THE ESCALON GENERAL PLAN.

WHEREAS, the Escalon City Planning Commission has studied and approved the Conservation and Open Space Element of the Escalon General Plan; and

WHEREAS, a public hearing was duly noticed before the City Council for February 19, 1974, by publication in The Escalon Times on February 6, 1974;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ESCALON, as follows:

1. That the Conservation and Open Space Element of the Escalon General Plan is hereby approved.

2. That the Conservation and Open Space Element shall be endorsed by signature of the Mayor of the City of Escalon, attested by the City Clerk of the City of Escalon, to show that it has been adopted by the City Council.

PASSED AND ADOPTED this 19th day of February, 1974 by the following vote:

AYES: Councilmen: Bodin, Schulz, Vilen and Mayor Hanlon.

NOES: Councilmen: None.

ABSENT: Councilmen: Hagan.

/s/ Jack P. Hanlon, Jr.
Jack P. Hanlon, Jr., Mayor

ATTEST:

/s/ Earl Wilson
Earl Wilson, City Clerk

CITY OF ESCALON
GENERAL PLAN
RECREATION ELEMENT

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Bibliography

Planning Commission Resolution No. 73-1

City Council Resolution No. 344

RECREATION ELEMENT OF THE ESCALON GENERAL PLAN

I

INTRODUCTION

A. General

Recreation as a necessity for individual health, welfare and pleasure has long been recognized as a fact. People demand recreation. There is a definite need for self-expression, for activities in which people can take pride and for physical activity to enjoy one's own being. The relation of recreation to mental and physical health and to other aspects of individual and community welfare has been well authenticated.

To meet these recreational needs, this plan has been prepared for the Escalon area. Background information, goals, and development policies related to recreation are presented to prepare the work program for implementation of the plan. The standards for the acquisition and development of recreation and park areas will be an updating of those established in the Escalon General Plan adopted in March of 1966, and are to meet the needs of the City in 1995. This element clarifies and supplements the policies and maps adopted in the General Plan.

B. Legislative History

The California Legislature has passed legislation requiring cities and counties to develop certain elements of a general plan, and authorized development of other elements as needed. The recreation element of a general plan is a permissive one, however, it is tied closely with the required elements on land use, circulation, conservation, and open space.

Section 56303(a) of the Government Code of the State of California suggests the content of the recreation element as "..... a comprehensive system of areas and public sites for recreation, including the following, and, when practicable, their proposed development:

- (1) Natural reservations
- (2) Parks
- (3) Parkways
- (4) Beaches
- (5) Playgrounds
- (6) Other Recreation Areas

C. Preparation History

The County of San Joaquin has adopted a county-wide recreation element to their general plan November 10, 1964. This plan has been updated at various times and has served as a guide in preparation of this element. The City of Escalon in adopting the Escalon General Plan on March 7, 1966 provided the first standards for recreational facilities. The Interim Open Space Element of the Escalon General Plan was adopted October 2, 1972 and has been used in preparing this element. Other input has been supplied by the Escalon Recreation Commission, the Escalon City Planning Commission, and the staff of the City of Escalon. Adoption of the plan was through the process required by Article 9, Chapter 3, Title 7 of the Government Code of the State of California.

D. Definition

Many authors have defined recreation, but a complete definition is very elusive. That is because recreation is many things to different people--a baseball game at a school play field, a tennis match at a private club, watching television, card games at a neighbor's house, a concert, dancing at a night club, a movie, painting--and a wide range of other active and passive endeavors too numerous to list. It is for this reason that quantitative standards for the entire field of recreation have traditionally been difficult to develop. Furthermore, it is difficult to assess what the future demands for recreation will be. The problem is further compounded in trying to determine what recreational facilities should be provided by government and what should be provided by the private sector. In most cases, government has felt the responsibility to at least provide for parks and playgrounds so as to assure that equal opportunities for some recreation facilities are available to all and no one is excluded because of economic reasons.

II

RESEARCH

A. Functions and Trends of RecreationFunctions

The function of recreation and recreation areas to the individual and to the community can be summarized as follows:

1. Recreation is enjoyable
2. Recreation offers an opportunity for self-expression and emotional experience.
3. Active recreation is vital to maintain physical and mental fitness.
4. Recreation activities reduce the potential for delinquency and mischief by keeping occupied.
5. Recreation provides a meaningful pastime and better life for elderly citizens.
6. Recreation is a means for the family to engage in activities together.
7. Recreation is good business because it adds to the local economy and creates a favorable community climate which assists in attracting new business and industry.
8. Recreation areas add to the aesthetic appearance of the community by providing open and landscaped areas.

Trends

General. In order to formulate recreation programs, projections of the future demand for recreational activities are needed. Outdoor recreation demand of the Escalon area residents is expected to increase at a rate greater than the population increase. This is due to a number of factors such as increasing amount of leisure time, increasing mobility, more expendable income and better education. Discussed hereafter are what are believed to be the major considerations pertaining to recreational opportunities in the Escalon area for the next few years.

Passive Pursuits. The passive pursuits (walking for pleasure, driving for pleasure, picnicking, nature walks, sightseeing, attending sports events, attending concerts, etc.) are the most popular, as they appeal to all age groups and require little in the way of specialized equipment or skill. These activities are expected to increase with relation to the increase in population and leisure time.

Active Pursuits. The active pursuits (including playing games and sports, bicycling, horseback riding, swimming, water skiing, boating, fishing, etc.) are gaining faster in popularity than the passive pursuits, however, they occupy a smaller proportion of the participants' time. During the past few years, emphasis has been placed on physical exercise for better health, therefore, the demand for

these types of activities can be expected to increase greater than population growth and leisure time.

Park Area. The National Park and Recreation and Open Space Standards, as published by the National Recreation and Park Association in 1971, recommends 2.5 acres per 1,000 population for neighborhood parks and 2.5 acres per 1,000 population for community parks, therefore totaling five acres per 1,000.

Although no similar standard has been developed for play lots, squares, plazas, etc., the Latta Park in this City has shown a daily usage on a small area by those in the neighborhood. Location of these parks has a greater bearing on their use, rather than size.

B. Recreation Inventory

General. The following is background information and an inventory of the physical resources available for recreation activities. Included in this inventory are city owned and/or operated sites, those under the jurisdiction of other public agencies, and a limited number of privately owned facilities, but does not include churches, private clubs, lodges and association, drinking establishments, night clubs, back yard swimming pools and public roadways which provide areas and facilities for recreation.

Plate I shows the location of the public facilities inventoried.

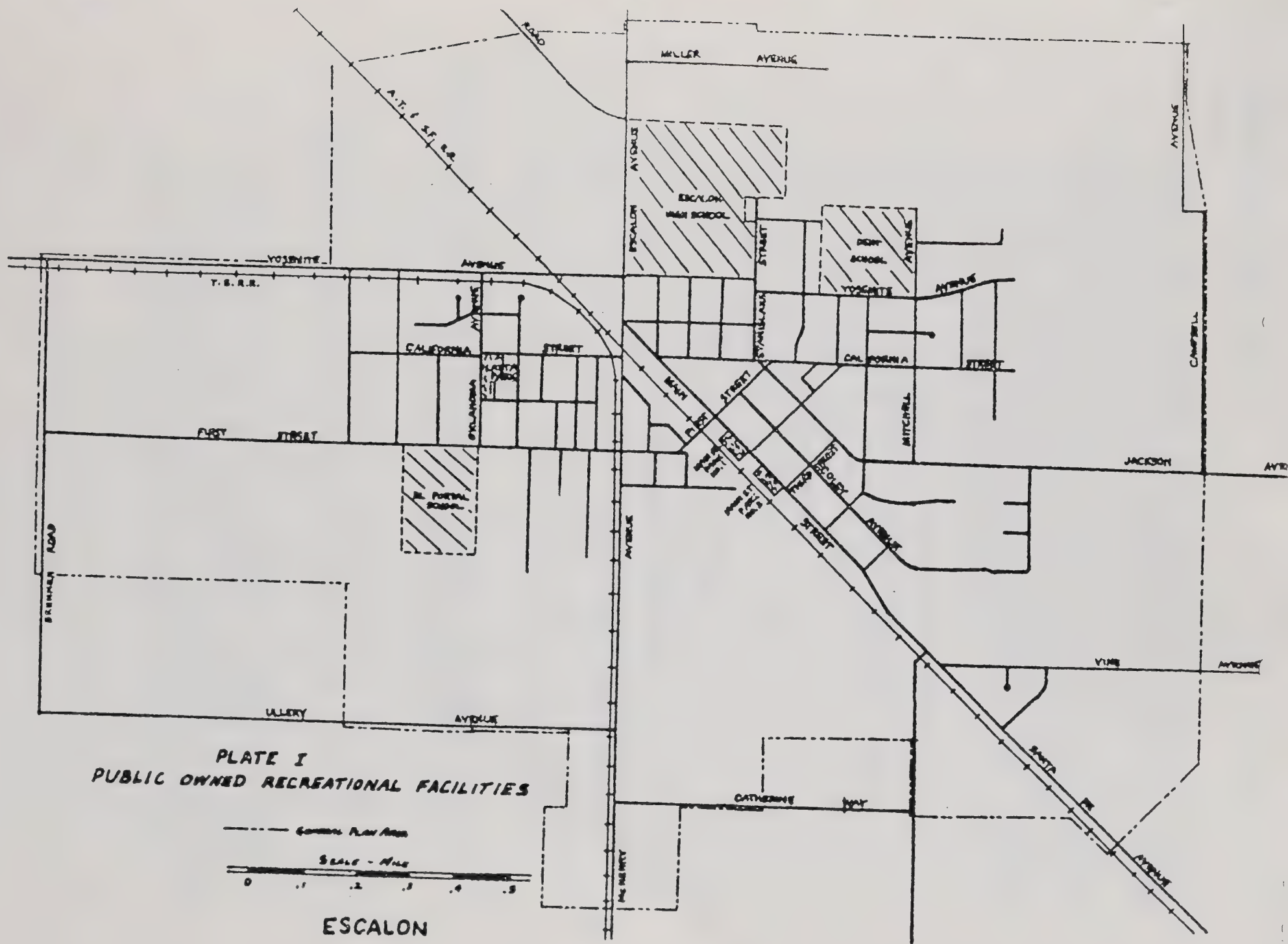
Existing Organization.

Recreation facilities and activities in Escalon, other than private, are provided by the City and by the Escalon Recreation Commission. The City provides for the maintenance of park sites on other than the school grounds. The Recreation Commission, consisting of members appointed by the County of San Joaquin, the City of Escalon, and the Escalon Unified School District, is responsible for developing and administering the recreation activities. In addition, the School District is responsible for the maintenance of the school facilities.

Parks:

1. Main Street Park No. 1. Located on the southwesterly side of Main Street between First and Second Streets. Size approximately one-half acre. Contains park-like area for free play and picnic use.
2. Main Street Park No. 2. Located on the southwesterly side of Main Street between Second and Third Streets. Approximately the same size and use as Main Street Park No. 1.
3. Latta Park. Located on the southeast corner of Oklahoma Avenue and California Street. The size is approximately two-thirds acre. Contains facilities with play lot, play apparatus, free play area, and picnic use.

Trails: A bicycle route is now under study. No other hiking or riding trails are in existence.



chools:

1. Dent School. Located on the north side of Yosemite Avenue between Sierra Drive and Mitchell Avenue. Size is approximately 16.4 acres. Contains elementary school with related facilities.
2. El Portal School. Located on the south side of First Street between Oklahoma and Irwin Avenues. Size is approximately 15 acres. Contains middle school with related facilities.
3. Escalon High School. Located on Yosemite Avenue between Escalon-Bellota Road and Stanislaus Street. Size is approximately 26 acres. Besides school facilities, contains one swimming pool and six tennis courts.

Facilities Not Owned or Operated by Government Agencies:

1. Golf Courses and Driving Ranges: None.
2. Recreation and swim clubs and associations: None.
3. Horseback riding stables: None.
4. Outdoor Theaters: None.
5. Little league diamonds: None.
6. Recreation Centers: None.
7. Theaters: Lyric Theater - not in use.
8. Bowling Alleys: None.
9. Billiard and Pool Parlors: None.
10. Historic buildings and areas: None.

C. Methods of Providing Recreational Facilities

General. Outlined below are some of the various methods that may be used to acquire or provide recreational facilities.

Acquisition in Fee. Full fee interest in land for recreation use may be acquired by purchase, through gifts or by the process of eminent domain.

Acquisition of Partial Interest. Interests that are less than the entire fee simple in land includes easements, leases, rights-of-entry, covenants running with the land, and other "development rights", a term commonly used to indicate a broad range of less-than-fee interests.

Methods of Financing. Since both full acquisition and less-than-fee acquisition are likely to be quite costly, methods beside the use of the property tax must be explored.

1. Property tax. Section 43000 of the Government Code authorizes a property tax levy of a maximum of \$0.15 per \$100 assessed valuation for the purpose to provide and maintain parks and music and for advertising purposes. The City electors must approve this tax. A property tax may be used by a Recreation District or special purpose district to provide park and recreation services. The size of the

district may be larger than the existing City, in order to provide a larger tax base which serves the citizens receiving the use of the recreation facilities.

Besides use of a restricted property tax, the general property tax may be used, although other demands on this tax restricts the amount available for recreation.

2. Subdivision Park Dedication. Where a developer subdivides land not particularly suitable for parks, or where sufficient park space exists nearby, the City presently requires the payment of fees, deposited in a special fund, to be devoted to park purchase. As an alternate, land of a value equal to the fees and in conformance with the General Plan for park development, may be dedicated in lieu of the fees.
3. User Fees and User Taxes. For certain intensively developed facilities, user fees and taxes may pay for a portion of the development costs.
4. Federal Funds. The Land and Water Conservation Fund and other Federal programs are available, however, at the present time the competition for the grants is stiff and some of the programs are being considered for phase-out to be replaced by special revenue sharing. While every effort should be made to obtain these grants, the City should not count on the programs only in implementing the recreation program.
5. State Funds. Except for recreation consultation services, the State of California has no recreation programs that can be directly beneficial to Escalon. The Z'berg-Collier State Beach, Park, Recreational, and Historical Facilities Bond Act of 1974 will be before the electors of the State in June of 1974, and if approved, may provide some financial assistance to the Escalon area.

III

ASSUMPTIONS OF THE RECREATION ELEMENT

The following are characteristics of the future development of the Escalon area arrived at by consensus without substantiating information and which will supposedly occur during the planning period.

1. That economic development and population will increase significantly in the future.
2. There will be an increase in the number of families having higher incomes which permit larger expenditures for recreation purposes, and in the amount of leisure time available to these families.
3. The long range boundaries of the plan are the same as the City of Escalon General Plan and, therefore, acknowledges total area needs regardless of political jurisdiction (recognizing that the City can only effectuate those recommendations falling under its jurisdiction).
4. The County, State and Federal Governments are committed to providing regional recreational facilities, therefore, this plan concentrates on providing and/or improving neighborhood, community and City-wide recreational facilities.
5. There will be continuous public and private support for City, County, and State planning and park and recreation programs.
6. Actual programming of recreational activities is not within the scope of this plan and is left in the hand of the Recreation Commission and the Parks and Recreation Department.

STATEMENT OF DEVELOPMENT POLICIES

A. Recreation Objectives.

1. To provide a system of parks and recreation areas for:
 - a) the preservation of unusual physical features and historical buildings
 - b) The promotion of health and well-being through the constructive use of leisure time, and
 - c) the conservation of natural resources
2. To provide sufficient and appropriate areas for parks and recreation facilities and services of community significance and use, which in conjunction with appropriately planned neighborhood and community parks and facilities, will satisfy the recreation needs of the entire population of the Escalon area and visitors to the Escalon area.
3. To provide a system of public open spaces which will be protected from urban development and so located that these spaces will serve as a reserve for future recreation areas.
4. To enhance the living environment by increasing the variety of recreation opportunities to meet the needs for both active and passive recreation for all persons regardless of age, color, race, creed, sex, or economic status.

B. Recreation Guiding Principles

The citizens of the Escalon area look upon their community towards enhancing the present and future environment to maintain a more desirable place for a family to live, work and play. To this end, the following principles are stated to guide the program of planning action which will be needed to fulfill the objectives desired by the citizens.

1. Establish a long-range acquisition program of park and recreation areas with a priority given to those areas possessing special physical features and/or those under pressure of being developed.
2. Prepare and pursue a program to finance the acquisition as from the State and Federal Government, donations, and participation by the present Escalon area citizens.
3. Participate in the development of a regional trail system with separate trails for motorized and non-motorized uses.
4. Encourage the use of flood control, irrigation and water district easements and public utility rights-of-way as corridors to be used for the regional trail system.
5. Support a coordinated program to develop an adequate number of public access points at suitable places along levees and water ways in the area.

6. Support the creation of ribbon parks existing waterways to provide additional recreation areas, buffers between communities, flood protection and to establish elements of a continuous regional trail system.
7. Encourage private recreation developments that preserve and enhance scenic and environmental values and that provide an adequate supervision and maintenance program.
8. Provide a playground as near as possible to the center of every residential neighborhood, preferably at or adjoining the elementary school, for use day by day and during brief periods of leisure.
9. Support the preservation of historical and cultural resources.
10. Promote the provision of manpower to reduce vandalism of parks, recreational facilities and adjoining private property.
11. Coordination of recreation programs will be provided by the Recreation Commission with the neighborhoods and community.

C. Standards

General. Public Parks and recreation spaces are generally classified into three types for the Escalon area. Each type serves a specific need, and when integrated into a community-wide program, will develop a balanced recreation program.

Play Lot, Square, Plaza

Size: 1/4 to 1 acre.

Desired Service Area: 1/4 mile radius. Major streets or railroads to serve as natural service area boundary.

Location: Inner-block or local service streets.

These parks provide a play lot for young children in family residential areas, a gathering place for socializing in predominately senior citizen residential areas, and a rest stop for travelers or shoppers in the commercial areas.

Neighborhood Park

Size: 2.5 acres per 1,000 population - minimum 5 acres.

Desired Service Area: 1/2 mile radius.

Location: Preferably adjacent to an elementary school or near the center of a definable neighborhood.

These parks provide limited recreation facilities for children, a small family picnic area, and an area designated for senior citizens. This park is utilized for unsupervised play, with some special programs in crafts, science and sports.

Community Park

Size: 2.5 acres per 1,000 population - minimum 5 acres.

Service Area: 1.5 mile radius minimum.

Location: Preferably adjacent to a junior high or high school, near the center of several neighborhoods and on a collector street.

In addition to the features of a neighborhood park, the community park serves as an outdoor recreation center providing athletic fields, swimming pool, picnic areas, tennis courts and a community center building provides winter and indoor activity.

D. Plan Proposals

General. The planned proposal is the implementation of programs to achieve the recreation objectives. These are the actions to be taken by the City Council, the Planning Commission and the City staff.

Studies and Reports

1. Develop a formal survey program to perform the continuous process of program evaluation in order to provide for the changing recreational needs of the residents of Escalon.
2. Participate in an interagency study of the requirements and possible location for motor-bike trail system.

Programs of Park Acquisition and Development

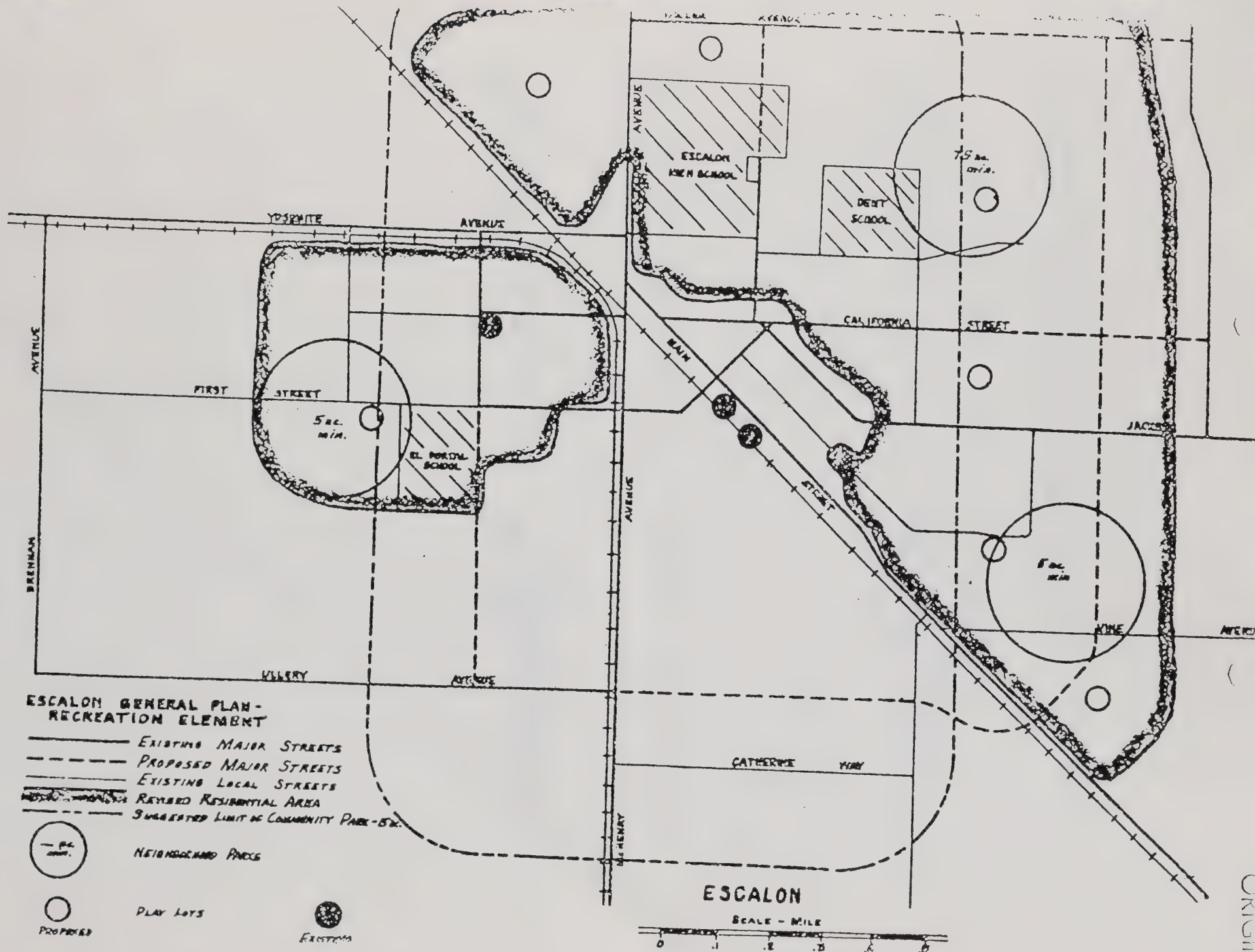
1. Initiate a study to determine feasibility of acquiring a community park site. (See Recreation Element Map for location area).
2. Provide for neighborhood parks on the 1,000 persons per/ acres^{2.5} ratio. (See Recreation Element Map for location areas).
3. Establish a play lot program whereas the City will make available professional assistance to neighborhoods or blocks interested in developing small minimum play areas. (See Recreation Element Map for location areas). Whenever possible, integrate these parks with neighborhood and community parks.
4. Initiate a study to determine feasibility of using recently annexed city property along Stanislaus River for a golf course in conjunction with the land's primary use as land disposal site for sewage effluents.
5. Continue to solicit grant and loan money made available by State and Federal agencies for park and recreational purposes.
6. Encourage the development of Planned Unit Residential Developments to secure better utilization of open space within group complexes.

Ordinance Adoption

1. Provide for the updating of the subdivision and division of land ordinances to require dedication of land or payment of in-lieu fees for parks by all developing subdivisions and other residential developments.

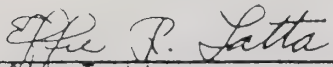
Coordination With Other Public Agencies

1. Continue to cooperate with other public and private agencies and institutions to assure maximum utilization and benefits of recreational lands and facilities.
2. Participate in the planning development of continuous bike-ways.

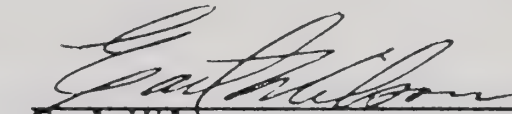


ORIGINAL

Adopted by Resolution No. 73-1 of the Escalon City Planning Commission, this 13th day of August, 1973.



Effie Latta
Chairman

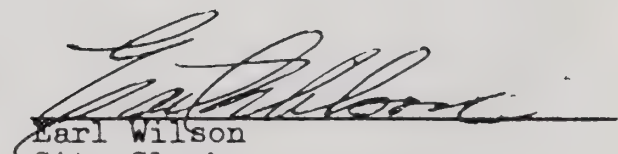


Earl Wilson
Secretary

Adopted by Resolution No. 344 of the Escalon City Council this 4th day of September, 1973.



Jack P. Hanlon, Jr.
Mayor



Earl Wilson
City Clerk

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RESOLUTION NO. 73-1

A RESOLUTION OF THE ESCALON CITY PLANNING COMMISSION
RECOMMENDING APPROVAL OF THE RECREATION ELEMENT OF
THE ESCALON GENERAL PLAN.

WHEREAS, The Escalon City Planning Commission has studied and prepared the Proposed Recreation Element of the General Plan for the City of Escalon; and

WHEREAS, a public hearing for the purpose of allowing all persons to be heard for or against the Proposed Recreation Element was set for the 13th day of August, 1973 at 7:30 P.M.; and notice of said hearing was duly published the 1st day of August, 1973 in the Escalon Times; and

WHEREAS, the Planning Commission has considered said Proposed Recreation Element.

NOW, THEREFORE, BE IT RESOLVED BY THE ESCALON CITY PLANNING COMMISSION, as follows:

1. The Planning Commission has found the Proposed Recreation Element is suitable for the recreational needs for the controlled development of the City of Escalon, and does hereby recommend to the City Council of the City of Escalon the adoption of the Proposed Recreation Element.

2. That a certified copy of this resolution be forwarded to the City Council of the City of Escalon by the Planning Commission Secretary as the report of the Planning Commission.

Passed and adopted this 13th day of August, 1973.

AYES: Commissioners: Blixt, DeBie, Stewart and Chairman Latta.
NOES: Commissioners: None.
ABSENT: Commissioners: Silva.

/s/ Effie R. Latta
Chairman, Escalon City
Planning Commission

ATTEST:

/s/ Earl Wilson
Secretary, Escalon City
Planning Commission

RESOLUTION NO. 344

A RESOLUTION OF THE CITY COUNCIL OF THE CITY
OF ESCALON ADOPTING THE RECREATION ELEMENT
OF THE ESCALON GENERAL PLAN.

WHEREAS, the Escalon City Planning Commission has studied and approved the Recreation Element of the Escalon General Plan; and

WHEREAS, a public hearing was duly noticed before the City Council for September 4, 1973, by publication in the Escalon Times on August 22, 1973; and

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Escalon, as follows:

1. That the Recreation Element of the Escalon General Plan is hereby approved.

2. The Recreation Element shall be endorsed by signature of the Mayor of the City of Escalon, attested by the City Clerk of the City of Escalon, to show that it has been adopted by the City Council.

PASSED AND ADOPTED this 4th day of September, 1973 by the following vote:

AYES: Councilmen: Bodin, Hagan, Vilen and Mayor Hanlon.

NOES: Councilmen: None.

ABSENT: Councilmen: Schulz.

/s/ Jack P. Hanlon, Jr.
Jack P. Hanlon, Jr., Mayor

ATTEST:

/s/ Earl Wilson
Earl Wilson, City Clerk

U.C. BERKELEY LIBRARIES



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